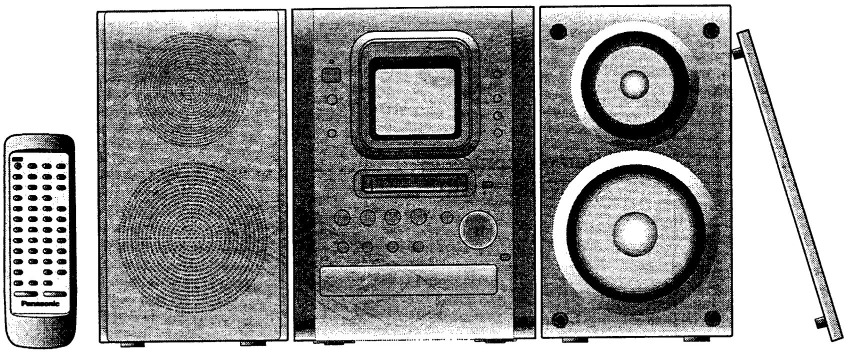
MD stereo system

Operating Instructions

Model No. **SC-PM35MD**



COMPACT
disc
DIGITAL AUDIO

Mini
Disc

Panasonic®

PANA -11432

Note:
"EB" on the packaging indicates the United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

EB GCS

RQT5600-B

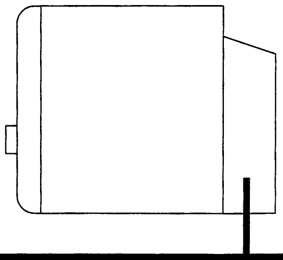
Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.
These operating instructions are applicable to the following system.

System	SC-PM35MD
Main unit	SA-PM35MD
Speakers	SB-PM35

CD and MD sections

Right side of the product



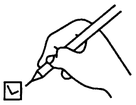
CLASS 1
LASER PRODUCT

DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.	(Inside of product)
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Indersiden at apparatet)
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	(Tuotteen sisällä)
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.	(Apparatens insida)
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Produktets innside)
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	(Im Inneren des Gerätes)

CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

CAUTION!
DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING.

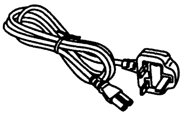
Supplied accessories

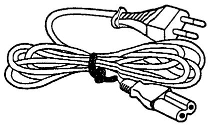


Please check and identify the supplied accessories.

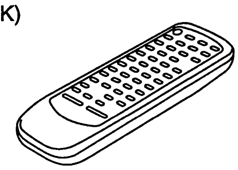
☐ **AC mains lead** .... 1 pc.

For United Kingdom	**For others**
(VJA0733)	(RJA0019-2K)

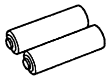




☐ **Remote control** .... 1 pc.
(RAK-SC971WK)

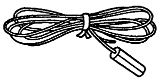


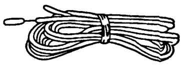
☐ **Remote control batteries** .... 2 pcs.



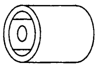
☐ **FM indoor antenna** .... 1 pc.

For United Kingdom	**For others**
(RSA0007)	(RSA0006-J)

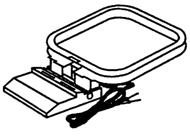




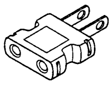
☐ **FM antenna plug adaptor** .... 1 pc.
(Only for United Kingdom)
(SJP9009)



☐ **AM loop antenna** .... 1 pc.
(RSA0033A)



☐ **Power plug adaptor** .... 1 pc.
(Except for United Kingdom)
(RJP1SG04-H)



Use numbers indicated in parentheses when asking for replacement parts.

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Safety precautions

Placement

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Place it at least 15 cm away from wall surfaces to avoid distortion and unwanted acoustical effects.

Do not place heavy items on the unit.

Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.

Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

Caution for AC Mains Lead

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

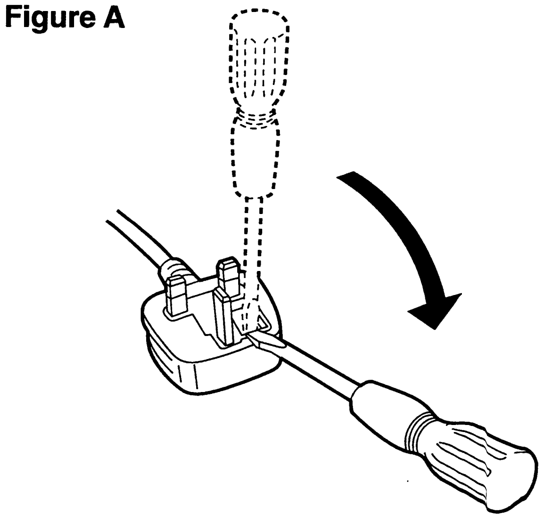
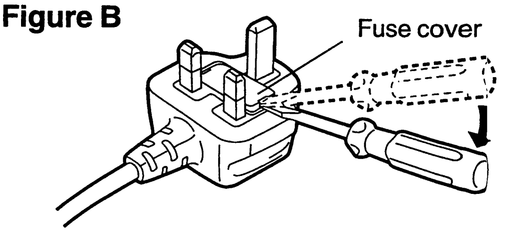


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

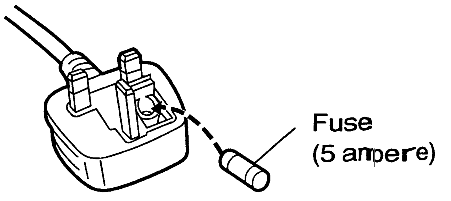
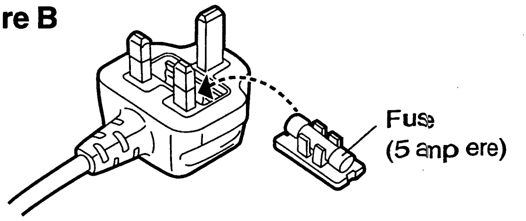
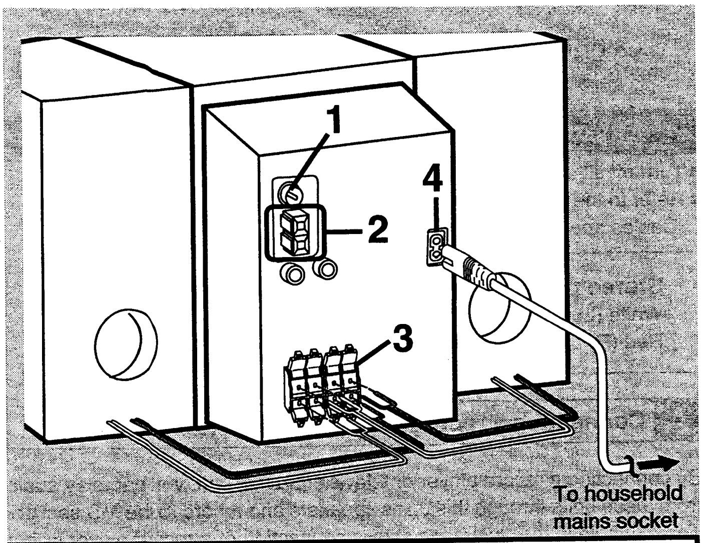
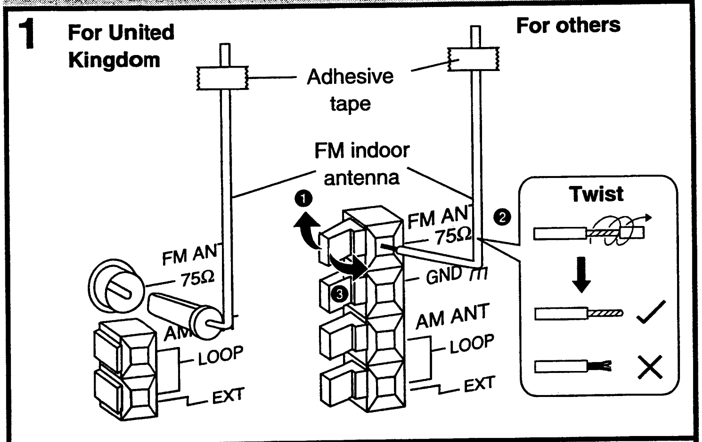


Figure B

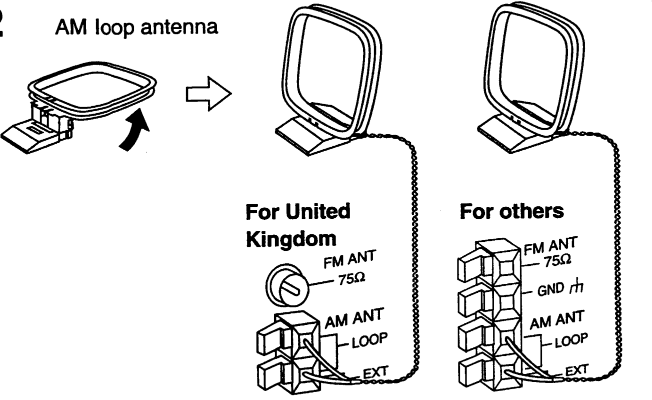



1
2
3
4
To household mains socket

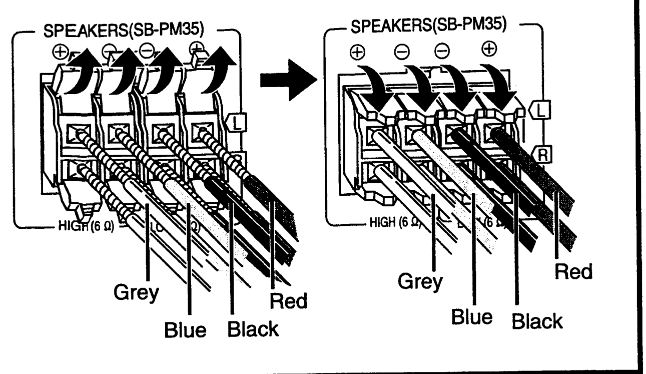
1


For United Kingdom
Adhesive tape
FM indoor antenna
For others
FM ANT 75Ω
AM
LOOP
EXT
❶
❷
❸
GND
AM ANT
Twist

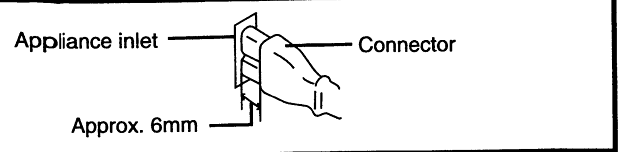
2


AM loop antenna
For United Kingdom
For others
FM ANT 75Ω
GND
AM ANT
LOOP
EXT

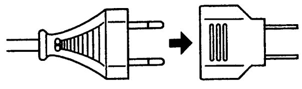
3


SPEAKERS(SB-PM35)
⊕ ⊖ ⊖ ⊕
L
R
HIGH(6 Ω)
Grey
Red
Blue
Black

4


Appliance inlet
Connector
Approx. 6mm

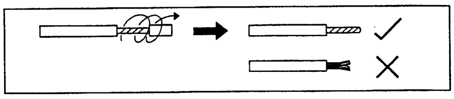
A



Connections

Before connection

- Do not connect the AC mains lead until all other connections are complete.
- To prepare the AM loop antenna, and speaker cables, twist the vinyl tip and pull off.



1 FM antenna

Fix the other end of the antenna where reception is best.

2 AM loop antenna

Stand the antenna up on its base.
Keep loose antenna cord away from other wires and cords.

3 Speaker cables

Connect the cables to the terminals of the same colour so (+) and (–) are correct. Never allow the exposed wires to contact each other when connected.
Incorrect connection can damage the unit.

Use only the supplied speakers.
The combination of the main unit and the speakers provides the best sound. Using other speakers can damage the unit and sound quality will be negatively affected.

Caution

- **Use the speakers only with the recommended system.**
  Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire.
  Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.
- **Do not attach these speakers to walls or ceilings.**

(FOR UNITED KINGDOM ONLY)
READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 4 BEFORE CONNECTION.

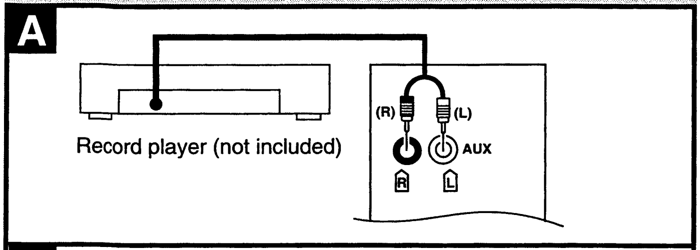
4 Connect the AC mains lead.

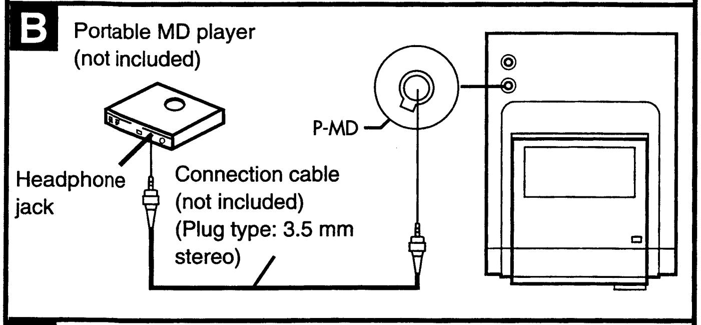
Insertion of connector
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.
However there is no problem using the unit.

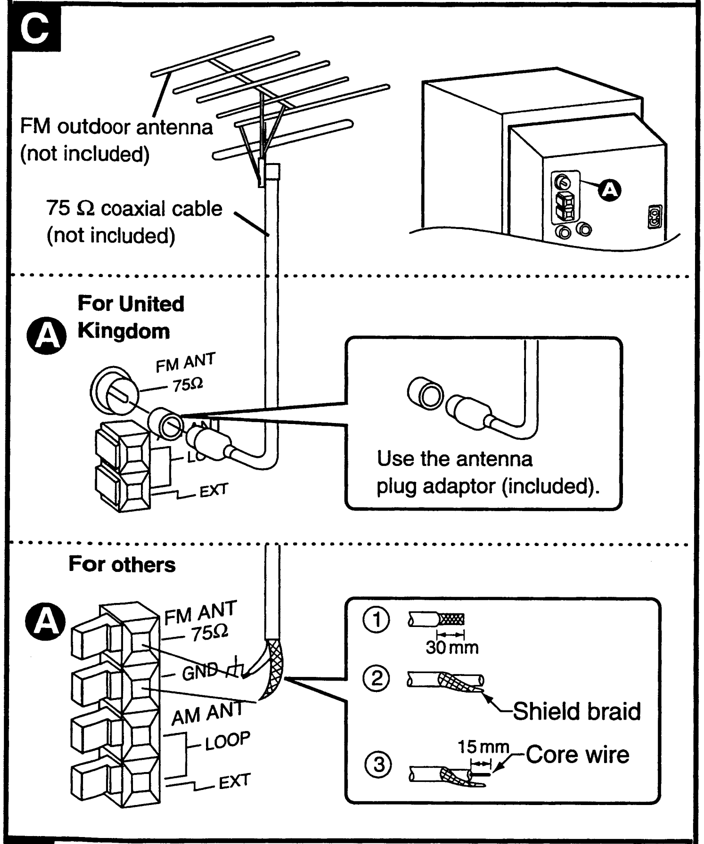
A Except for United Kingdom
Use the adaptor (included) if the plug does not fit your socket.

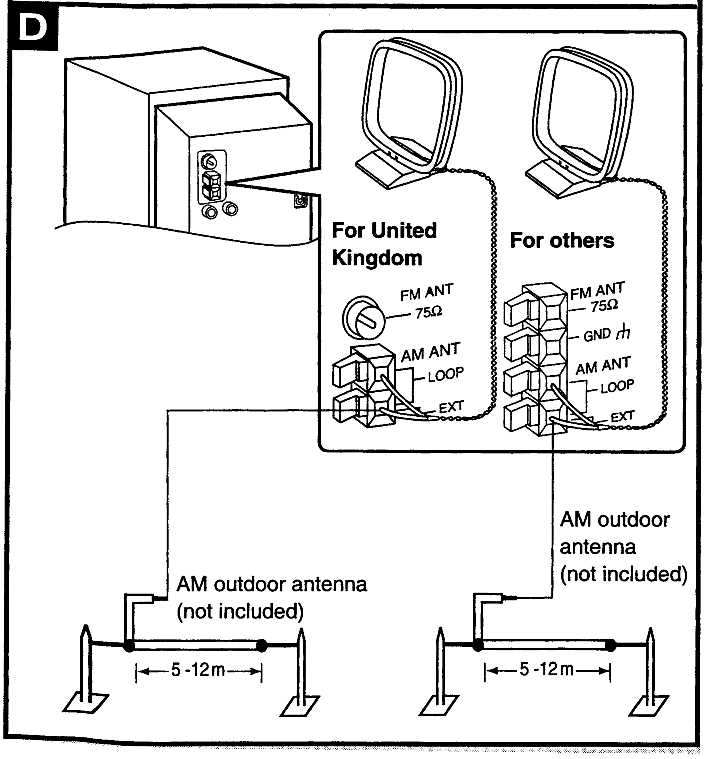
Note
The included AC mains lead is for use with this unit only. Do not use it with other equipment.

For your reference
Information you enter into the unit's memory, except for time, remains intact for up to two weeks after the mains lead is disconnected.


A
Record player (not included)
(R)
(L)
AUX
R
L


B
Portable MD player
(not included)
P-MD
Headphone
jack
Connection cable
(not included)
(Plug type: 3.5 mm
stereo)


C
FM outdoor antenna
(not included)
75 Ω coaxial cable
(not included)
A
For United Kingdom
A
FM ANT
75Ω
EXT
Use the antenna
plug adaptor (included).
For others
A
FM ANT
75Ω
GND
AM ANT
LOOP
EXT
①
30 mm
②
Shield braid
③
15 mm
Core wire


D
For United
Kingdom
FM ANT
75Ω
AM ANT
LOOP
EXT
For others
FM ANT
75Ω
GND
AM ANT
LOOP
EXT
AM outdoor
antenna
(not included)
AM outdoor antenna
(not included)
5 -12m
5 -12m

Connections

External unit connections

- Turn off all units before making connections.
- Refer to the manual of the other unit for details.
  (Cables and equipment not included.)

Stereo phono cable (not included)

White (L)
Red (R)

A Connecting a record player or television

By connecting a record player or television to this unit, you can play audio from these units through this unit's speakers and record to the MD section.
The example in the illustration shows connection of a record player with a built-in phono equalizer.
When connecting a record player other than this type, consult your audio dealer.

B Connecting a portable MD player

You can make analog recordings of sound from a portable MD player.
Connect the unit to the headphone jack of the portable MD player.

Note

Do not put the portable MD player on top of this unit when recording.
This can cause noise.

Optional antenna connections

Use outdoor antennas if radio reception is poor.

C FM outdoor antenna

- Disconnect the FM indoor antenna.
- The antenna should be installed by a competent technician.

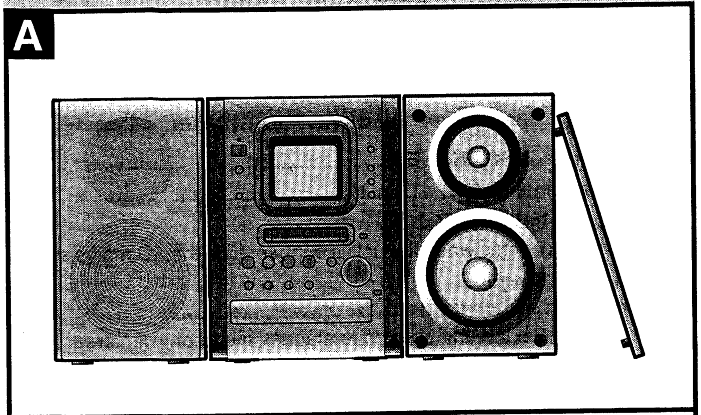
D AM outdoor antenna

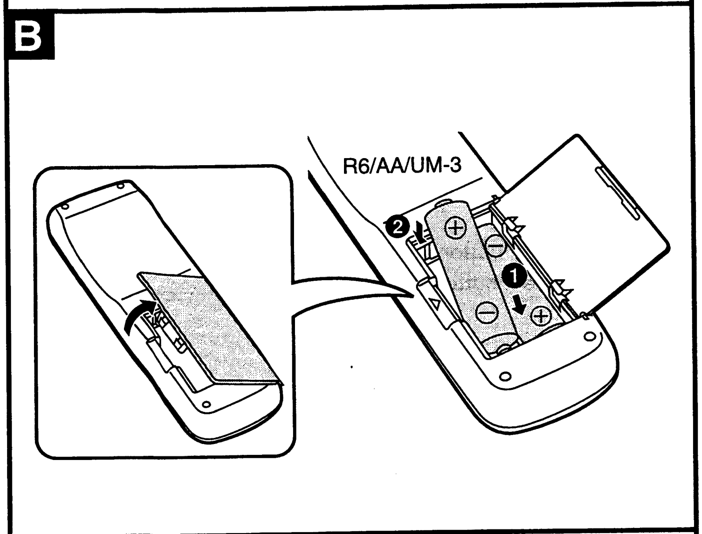
Run a piece of vinyl wire horizontally across a window or other convenient location.

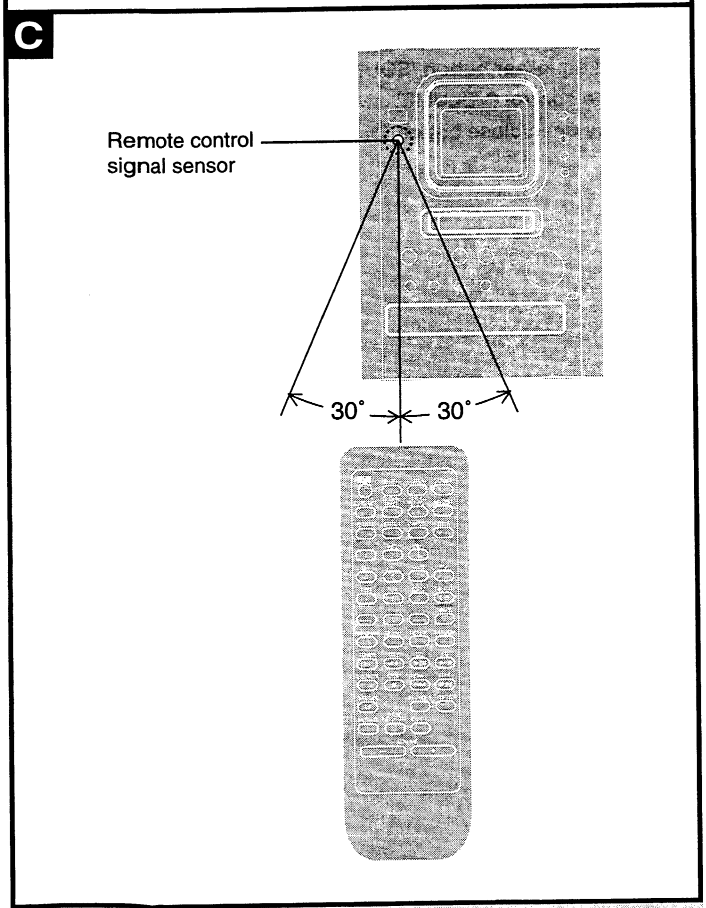
Notes

- Leave the loop antenna connected.
- Disconnect the antenna when the unit is not in use. Do not use the antenna during an electrical storm.

See pages 40 and 41 for details about operating other equipment.







A Placement of speakers

Speakers are designed identically so that no left or right channel orientation is necessary.

Notes

- Keep your speakers at least 10 mm away from the system for proper ventilation.
- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- To avoid damage to the speakers, do not touch the speakers cones if you have taken the nets off.

The remote control

B Batteries

- Insert so the poles (+ and –) match those in the remote control.
- Do not use rechargeable type batteries.

Do not;

- mix old and new batteries.
- use different types at the same time.
- heat or expose to flame.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.
- keep together with metallic objects such as necklaces.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.
If electrolyte leaks from the batteries, consult your dealer.
Wash thoroughly with water if electrolyte comes in contact with any part of your body.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.
Replace if the unit does not respond to the remote control even when held close to the front panel.

If the battery lid comes loose, slide it back into place horizontally.

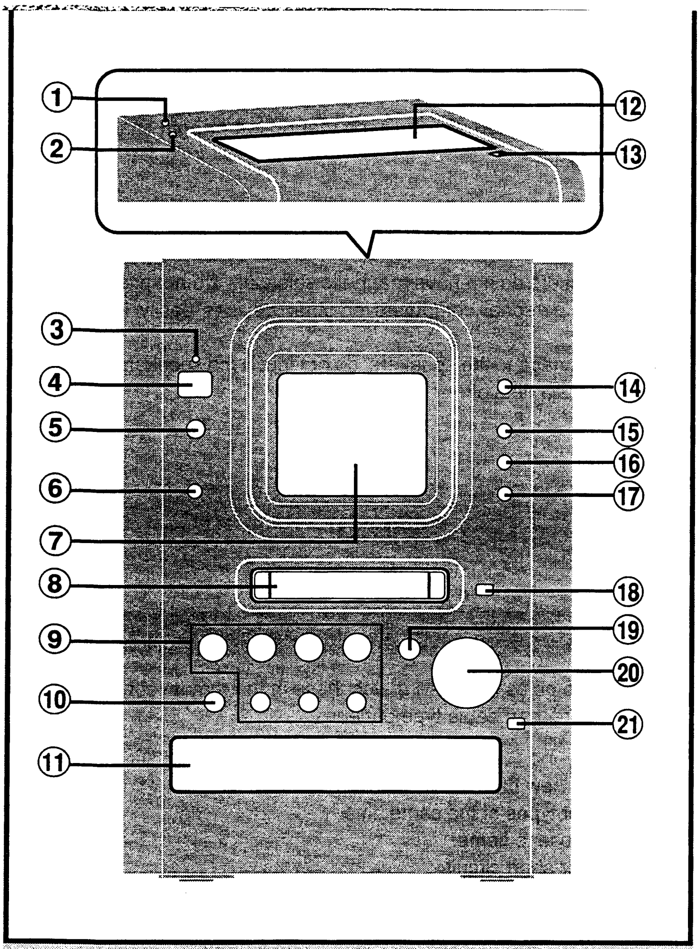
C Use

Aim at the sensor, avoiding obstacles, at a maximum range of 7 meters directly in front of the unit.

- Keep the transmission window and the unit's sensor free from dust.
- Operation can be affected by strong light sources, such as direct sunlight, and the glass doors on cabinets.

Do not;

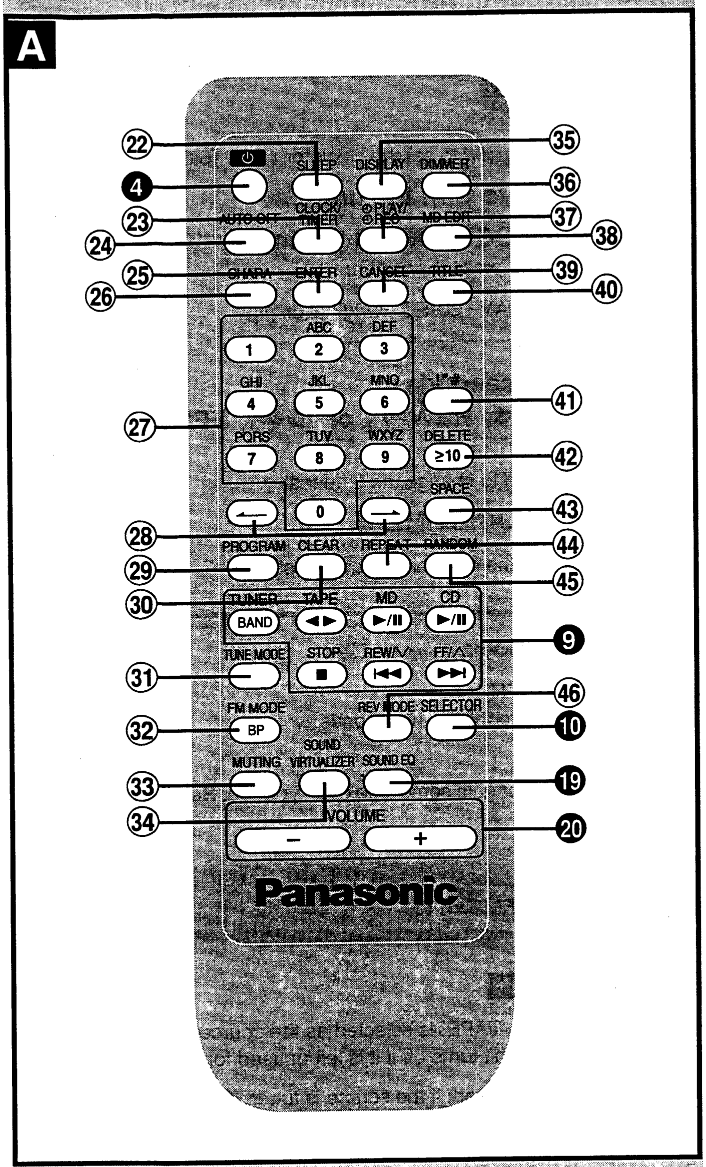
- put heavy objects on the remote control.
- take the remote control apart.
- spill liquids onto the remote control.

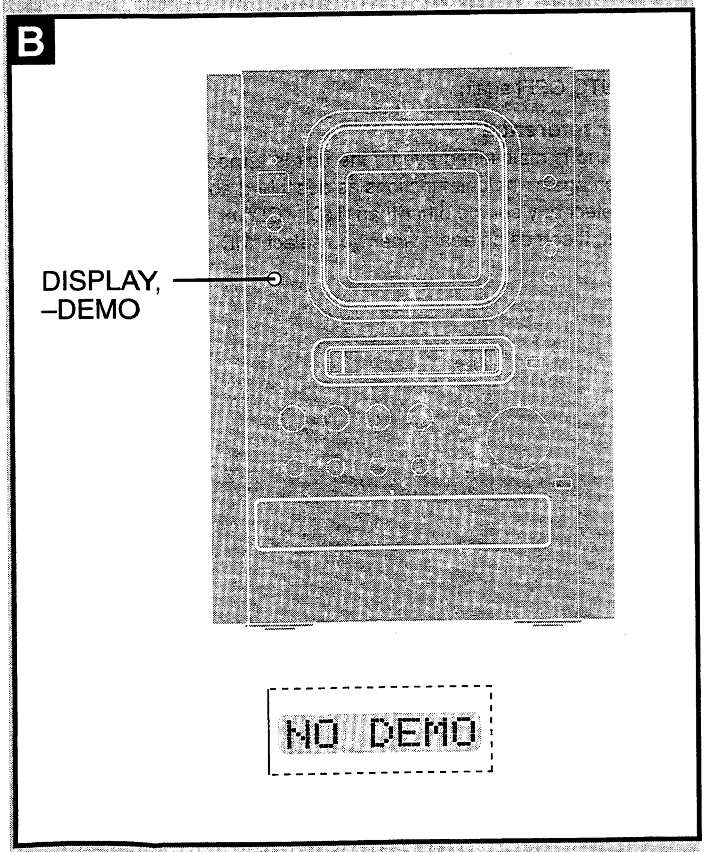


Front panel controls

Main unit

①	**Headphone jack (PHONES)**	36
②	**P-MD terminal (P-MD)**	6
③	**AC supply indicator (AC IN)** This indicator lights when the unit is connected to the AC mains supply.	
④	**For United Kingdom** **Standby/on switch (⏻/I)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power. **For others** **Standby/on switch (POWER ⏻/I)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	12 12
⑤	**Remote control signal sensor**	7
⑥	**Display select/demonstration button (DISPLAY, –DEMO)**	9, 16, 20, 36
⑦	**Display**	
⑧	**MD slot**	
⑨	**Main operating buttons**	
⑩	**Function select button (SELECTOR)**	40, 41
⑪	**CD tray**	
⑫	**Cassette holder**	
⑬	**Cassette holder open button (⏏, OPEN)**	18
⑭	**MD/CD recording mode select, SP/LP mode select button (EDIT MODE, –SP/LP)**	20, 23
⑮	**MD&TAPE record button (● MD&TAPE REC)**	22
⑯	**Tape record/pause button (● TAPE REC/ II)**	22
⑰	**MD record/pause button (● MD REC/ II)**	22
⑱	**MD eject button (⏏, EJECT)**	12
⑲	**Sound equalizer button (SOUND EQ)**	35
⑳	**Volume control (VOLUME)**	12
㉑	**CD tray open/close button (⏏, OPEN/CLOSE)**	13


A
㉒
㉟
❹
㊱
㉓
㊲
㉔
㊳
㉕
㊴
㉖
㊵
㉗
㊶
㊷
㉘
㊸
㊹
㉙
㊺
㉚
❾
㉛
㊻
㉜
❿
㉝
⓳
㉞
⓴
SLEEP
DISPLAY
DIMMER
AUTO OFF
CLOCK/TIMER
⊙PLAY/⊙REC
MD EDIT
CHARA
ENTER
CANCEL
TITLE
ABC
DEF
1
2
3
GHI
JKL
MNO
!"#
4
5
6
PQRS
TUV
WXYZ
DELETE
≥10
7
8
9
0
SPACE
PROGRAM
CLEAR
REPEAT
RANDOM
TUNER
TAPE
MD
CD
BAND
TUNE MODE
STOP
REW/∨
FF/∧
FM MODE
BP
REV MODE
SELECTOR
SOUND VIRTUALIZER
MUTING
SOUND EQ
VOLUME
−
+
Panasonic


B
DISPLAY, –DEMO
NO DEMO

Front panel controls

A Remote control

Buttons such as ❹ function in the same way as the controls on the main unit.

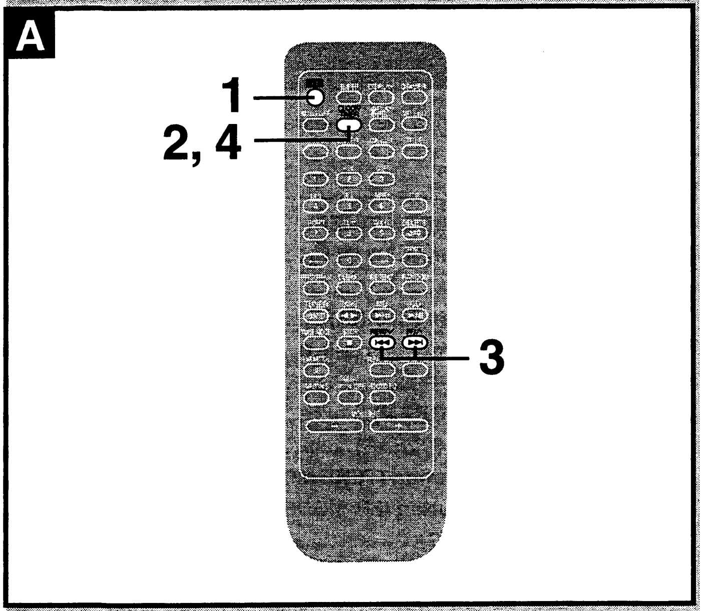
㉒	**Sleep button (SLEEP)**	**39**
㉓	**Clock/timer button (CLOCK/TIMER)**	**10, 37**
㉔	**Auto power-off button (AUTO OFF)**	**10**
㉕	**Enter button (ENTER)**	**28**
㉖	**Character select button (CHARA)**	**32**
㉗	**Numbered, character buttons (1-9, 0, A-Z)**	**14, 17, 32**
㉘	**Cursor buttons (←, →)**	**32**
㉙	**Program button (PROGRAM)**	**15**
㉚	**Program clear button (CLEAR)**	**15**
㉛	**Tuning mode select button (TUNE MODE)**	**16**
㉜	**FM mode/BP select button (FM MODE, BP)**	**16, 26**
㉝	**Muting button (MUTING)**	**36**
㉞	**Sound virtualizer button (SOUND VIRTUALIZER)**	**35**
㉟	**Display select button (DISPLAY)**	**16, 20, 36**
㊱	**Dimmer button (DIMMER)**	**36**
㊲	**Play/record timer button (⊙PLAY/⊙REC)**	**37, 38**
㊳	**MD edit button (MD EDIT)**	**28**
㊴	**MD edit cancel button (CANCEL)**	**28**
㊵	**Title edit button (TITLE)**	**31**
㊶	**Symbol button (!"#)**	**32**
㊷	**Delete, ten and over button (≥10, DELETE)**	**14, 17, 32**
㊸	**Space button (SPACE)**	**32**
㊹	**Repeat button (REPEAT)**	**14**
㊺	**Random button (RANDOM)**	**14**
㊻	**Reverse mode select button (REV MODE)**	**18**

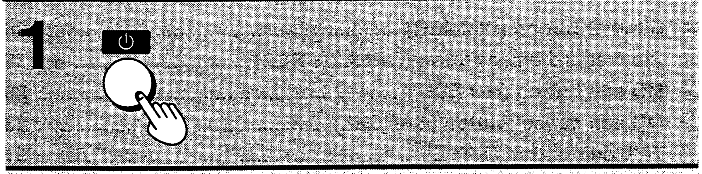
B Turning the demo function off

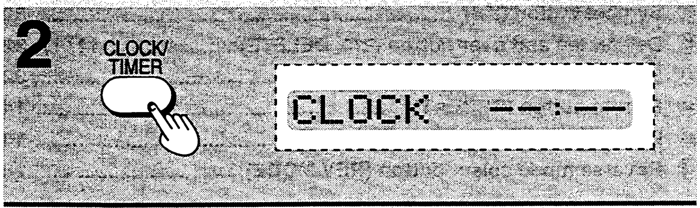
If "DEMO" is left on, it turns the unit on and starts about ten seconds after you turn the unit off if you haven't set the clock.
This function is set to on at the time of purchase.

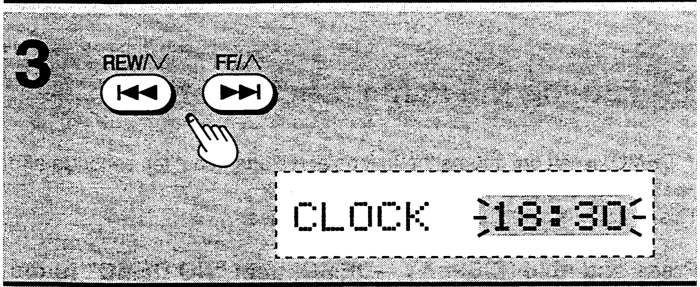
Press and hold [DISPLAY, –DEMO] until "NO DEMO" is displayed.
The display changes each time the button is held down.
NO DEMO (off) ↔ DEMO (on)

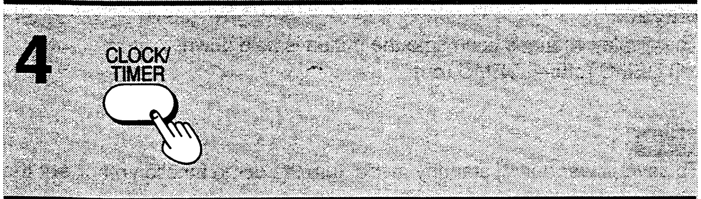
Note
To save power during standby mode, turn the demo function off or set the clock.

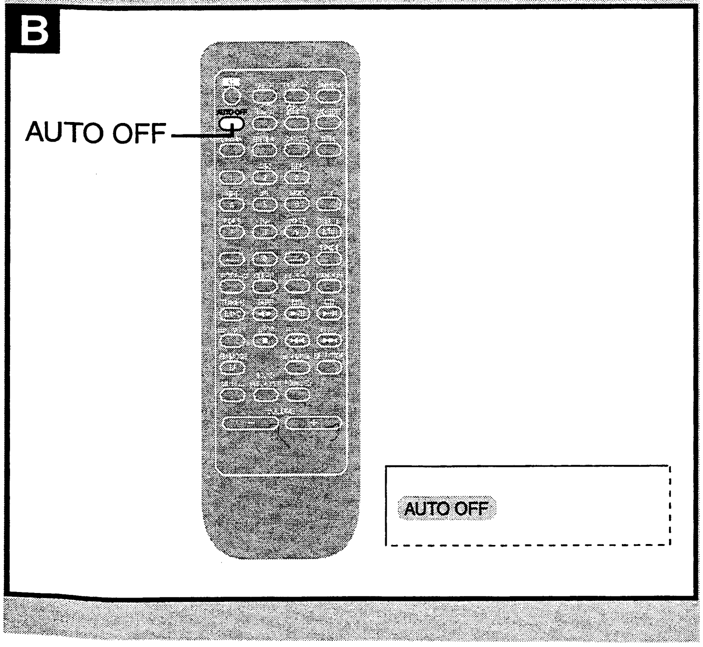












A Setting the time

Remote control only

This is a 24-hour clock.

The example shows how to set the clock for 18:30 (6:30 pm).

1 **Press [⏻] to turn the unit on.**

2 **Press [CLOCK/TIMER] to display "CLOCK".**

Each time you press the button:

CLOCK→⊙PLAY→⊙REC→Original display
↑______________________________|

3 **Within 10 seconds**
Press [⏮, REW/∨] or [⏭, FF/∧] to set the time.

Press and hold to change the time faster.

4 **Press [CLOCK/TIMER].**

The time is set and the original display is restored.

Displaying the clock

Press [CLOCK/TIMER].
The clock is shown for about 10 seconds.

Note

The clock may lose or gain some time over a period. Readjust if necessary.

B Auto power-off

Remote control only

When "MD", "CD" or "TAPE" is selected as the source
To save power, the unit turns off if it is left unused for 10 minutes.

This function does not work if the source is tuner, AUX or P-MD.

Press [AUTO OFF].

"AUTO OFF" is displayed.

To cancel

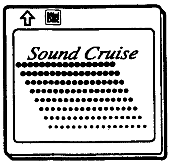
Press [AUTO OFF] again.

For your reference

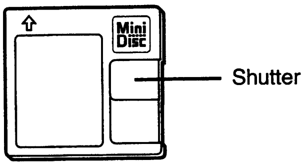
- The setting is maintained even if the unit is turned off. When the unit is turned on again, the unit functions as described above.
- If you select any source other than "MD", "CD" or "TAPE", "AUTO OFF" goes out. It comes on again when you select "MD", "CD" or "TAPE".

Some useful information about MDs

Types of MDs



Prerecorded MDs
These discs are for playback only.



Recording MDs
Apart from the time limitations, it is possible to record up to 254 tracks on an MD.

Recording on MDs

MDs are different to tapes

MDs give you control over how tracks are recorded and editing functions allow you to change the contents of an MD after recording.

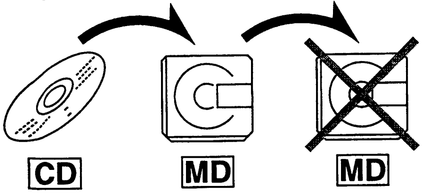
Unlike cassettes, you do not need to find an empty space to start recording as all recordings start from the first available space. When the MD fills up, you can use the editing functions to erase unneeded tracks. You cannot record over tracks.

Limitations on digital recording

The serial copy management system (SCMS) prevents unlimited recording of digital material.

Clear, relatively intact, digital recordings can be made when recording a CD in this unit. So to protect the rights of the producer of the original material, it is not possible to make a further recording from that MD to another MD.

Analog recordings are unlimited by this system.



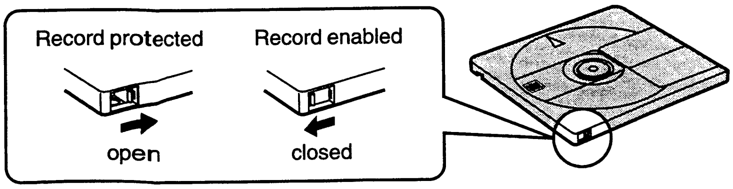
Stereo and monaural recording

This unit is capable of recording in stereo or monaural and can playback MDs recorded in stereo or monaural.

Monaural recording allows approximately twice the amount of material to be recorded and played back, but sound quality is affected.

Protecting your recordings

Move the switch to open the write protect hole. Close the hole when you want to record or edit the MD again.



Note when recording, editing, and titling

These operations are not complete until "UTOC Writing" and the " UTOC " indicator stop flashing on the display. Be careful not to interrupt the power supply otherwise these operations will not be completed and the disc itself can be damaged.

Glossary of terms

Analog
This is the method that records and cassettes use to handle sound signals. It is possible to make analog recordings with MDs.

Digital
This is the usual method used by MDs and CDs to carry and record sound signals. Digital recording can be of very high quality.

Editing
This refers to any post-recording changes made to the MD.

Marking
This is the act of adding track marks. It can be done automatically when recording, or it can be done manually during recording or after recording with the editing functions.

TOC
Table of contents. Information stored on the MD about the tracks and times.

Track marks
These marks separate tracks. There can be up 254 marks on one MD. They can be inserted automatically or manually during recording, and they can be added or removed with the editing functions after recording.

UTOC
User table of contents. This is information the user can edit, such as text and track positions.
The message "UTOC Writing" appears on the display after recording and editing.

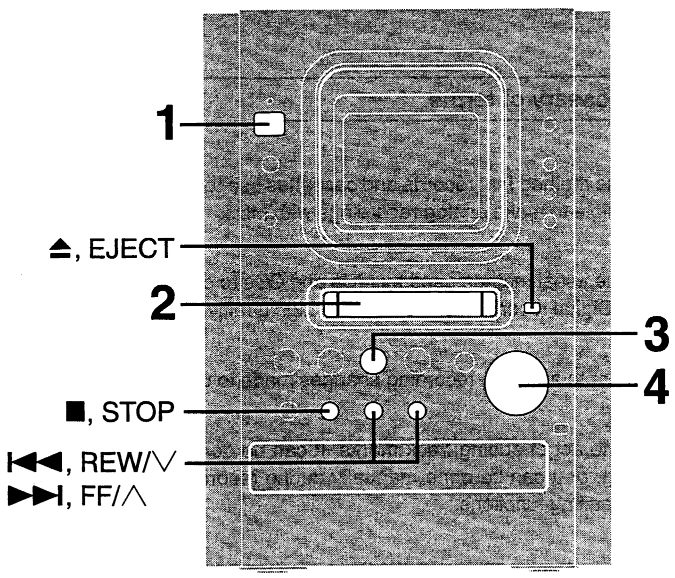
Care and storage

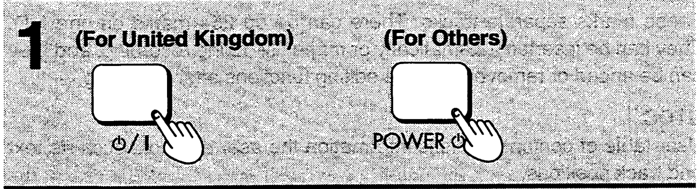
Label MDs only as recommended. Extra labels and exposed adhesive can cause malfunctions.

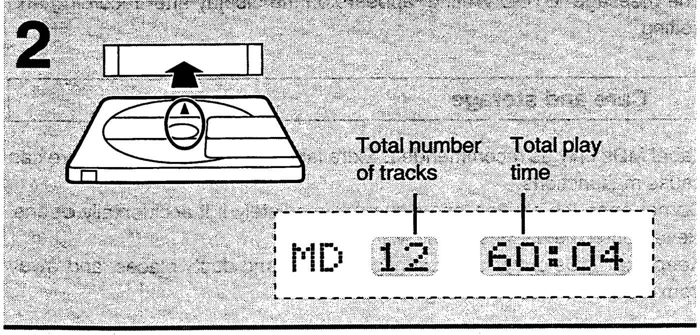
Do not open the shutter, and close it immediately if it accidentally opens.

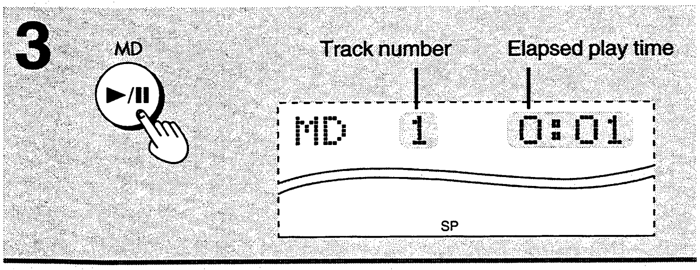
Never touch the disc inside the MD cartridge.

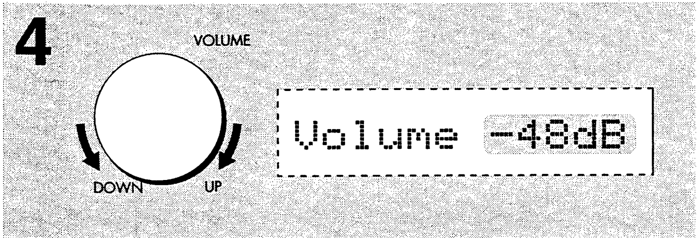
Keep your MDs out of direct sunlight, humid and dusty places, and away from the direct heat of heating appliances.


1
⏏, EJECT
2
3
4
■, STOP
⏮, REW/∨
⏭, FF/∧

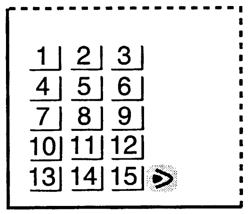

1
(For United Kingdom)
(For Others)
⏻/I
POWER ⏻


2
Total number of tracks
Total play time
MD 12 60:04


3
MD
▶/II
Track number
Elapsed play time
MD 1 0:01
SP


4
VOLUME
DOWN
UP
Volume -48dB

A


1 2 3
4 5 6
7 8 9
10 11 12
13 14 15 ⊵

MDs

1 Press [⏻/I].

The unit comes on automatically.

2 Insert the MD.

If "MD" is selected as the source, the message "TOC Reading" appears on the display, then information about the disc is shown; total number of tracks, total play time, and any text information on the disc. If "MD" is not selected as the source, you can see this information by pressing [▶/II, MD] and then [■, STOP].

3 Press [▶/II, MD] to start play.

When the track is recorded in SP mode
(Standard recording in stereo): "SP" lights.
When the track is recorded in LP mode
(Long play recording in monaural): "LP" lights.

4 Adjust the volume.

To stop the disc
Press [■, STOP].

To pause play
Press [▶/II, MD]. Press [▶/II, MD] again to resume play.

Skipping tracks
Press [⏮, REW/∨] (backward) or [⏭, FF/∧] (forward).

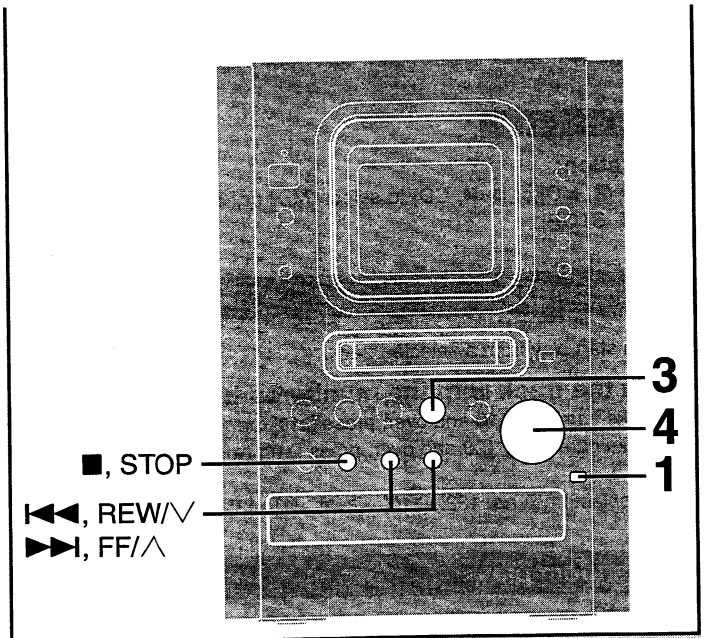
Searching through tracks
During play or pause
Press and hold [⏮, REW/∨] (backward) or [⏭, FF/∧] (forward).

One touch play
When an MD is loaded and the unit is off, press [▶/II, MD]. The unit comes on and starts play.

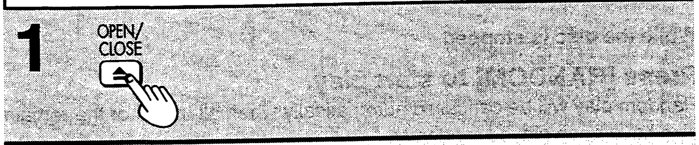
To eject the MD
Press [⏏, EJECT].

For your reference
A When " ⊵ " is displayed
There are 16 or more tracks on the disc.

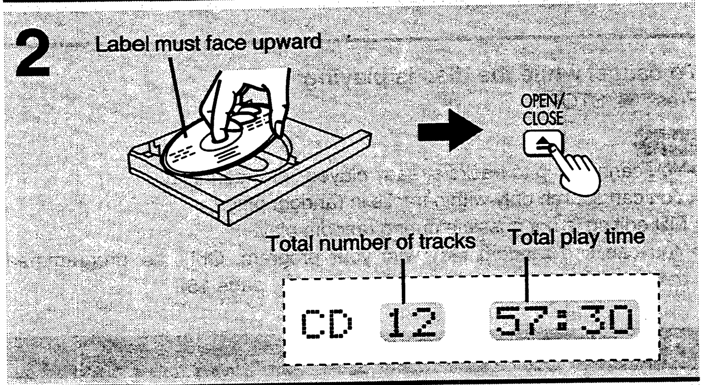
Note
MDs recorded with a long play MDLP* mode (LP2 or LP4) cannot be played on this unit. (The elapsed play time is displayed, but no sound is output).
*MDLP is a new MD format.



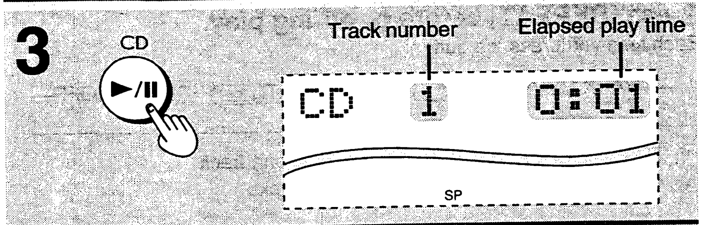
3
4
■, STOP
1
⏮, REW/∨
⏭, FF/∧



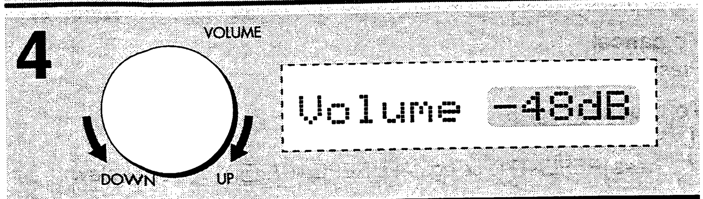
1
OPEN/ CLOSE
⏏



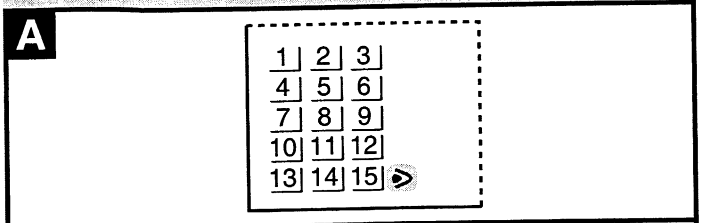
2
Label must face upward
OPEN/ CLOSE
⏏
Total number of tracks
Total play time
CD 12 57:30



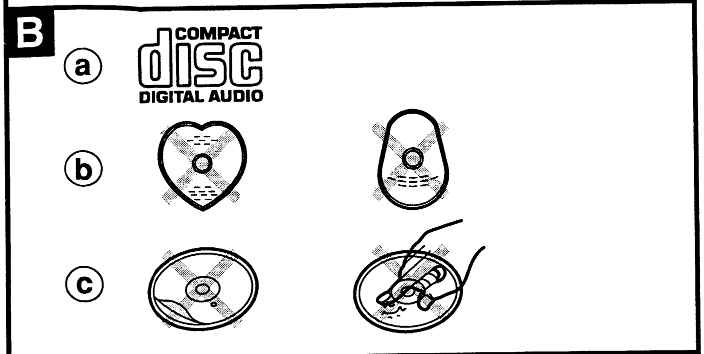
3
CD
▶/II
Track number
Elapsed play time
CD 1 0:01
SP



4
VOLUME
DOWN
UP
Volume -48dB



A
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15 ▷



B
ⓐ
COMPACT
disc
DIGITAL AUDIO
ⓑ
ⓒ

CDs

1 Press [⏏, OPEN/CLOSE] to open the tray.

The unit comes on automatically.

2 Insert the CD.

Set a CD label up on the tray.
Press [⏏, OPEN/CLOSE] to close the tray.
If "CD" is selected as the source, the message "TOC Reading" appears on the display then the total number of tracks and total play time are displayed.
If "CD" is not selected as the source, you can see this information by pressing [▶/II, CD] and then [■, STOP].

3 Press [▶/II, CD] to start play.

4 Adjust the volume.

To stop the disc
Press [■, STOP].

To pause play
Press [▶/II, CD]. Press [▶/II, CD] again to resume play.

Skipping tracks
Press [⏮, REW/∨] (backward) or [⏭, FF/∧] (forward).

Searching through tracks
During play or pause
Press and hold [⏮, REW/∨] (backward) or [⏭, FF/∧] (forward).

One touch play
When a CD is loaded and the unit is off, press [▶/II, CD]. The unit comes on and starts play.

To remove a CD
Press [⏏, OPEN/CLOSE].

For your reference
A When " ▷ " is displayed
There are 16 or more tracks on the disc.

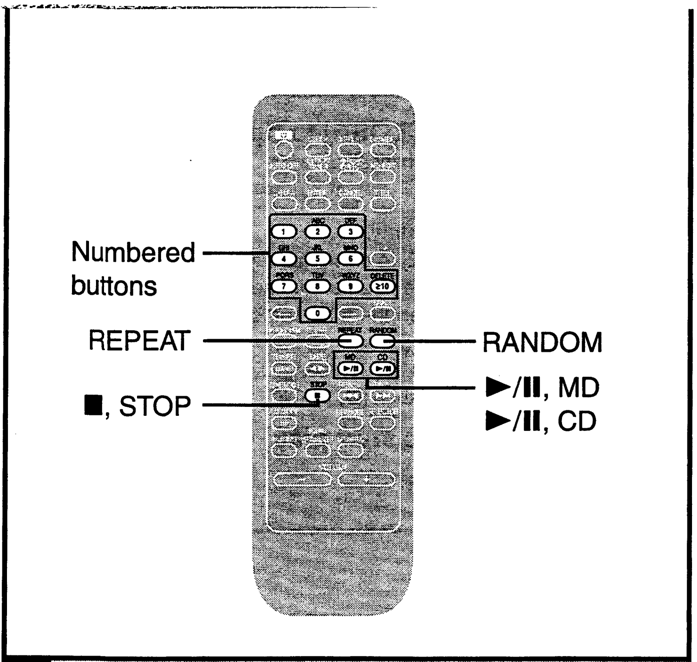
B CD selection and care

Choose discs with this mark: (ⓐ)

Do not;

- use irregularly shaped discs. (ⓑ)
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers. (ⓒ)
- attach scratch-proof covers or any other kind of accessory.
- write anything on the CD.
- clean CDs with liquids. (Wipe with a soft, dry cloth.)
- use CDs printed with label printers available on the market.

Other MD and CD functions

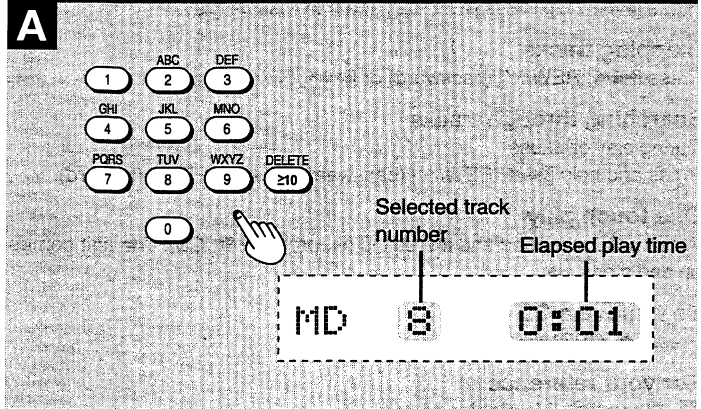

Numbered buttons
REPEAT
■, STOP
RANDOM
►/II, MD
►/II, CD

Remote control only

Preparation:
Press [►/II, MD] or [►/II, CD] to select "MD" or "CD" as the source then press [■, STOP].

A Direct play

A


1
ABC 2
DEF 3
GHI 4
JKL 5
MNO 6
PQRS 7
TUV 8
WXYZ 9
DELETE ≥10
0
Selected track number
Elapsed play time
MD 8 0:01

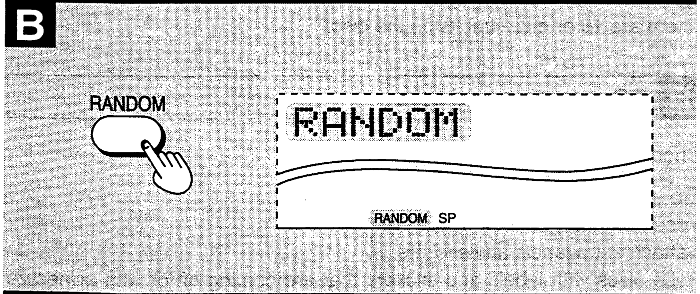
You can start play from a selected track.

Select the track with the numbered buttons.

For tracks numbered 10 and over, press [≥10] then the two digits.
For tracks numbered 100 and over, press [≥10] twice then the three digits (MD only).
e.g. To select track no. 132: [≥10]→[≥10]→[1]→[3]→[2]

B Random play

B


RANDOM
RANDOM
RANDOM SP

You can play the tracks once each in random order.

While the disc is stopped

Press [RANDOM] to start play.

Random play will be cancelled automatically when all tracks of the remain disc have been played randomly.

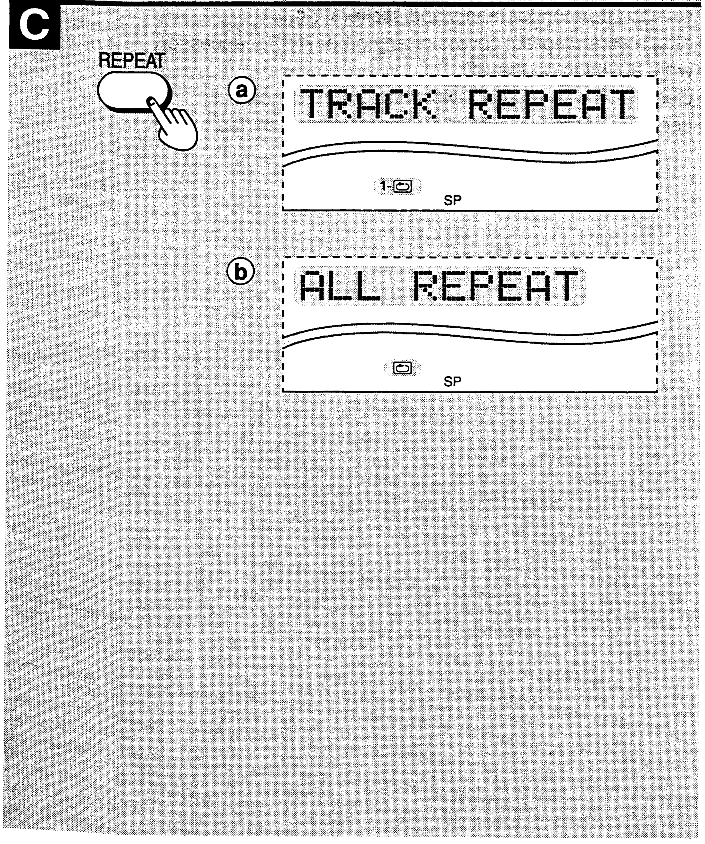
To cancel while the disc is playing
Press [■, STOP].

Note

- You cannot skip to tracks already played in random play.
- You can search only within tracks in random play.
- MD editing is not possible during random play.
- You can use random play with your program. Only the programmed tracks will be played, but in random order (→ page 15).

C Repeat play

C


REPEAT
ⓐ
TRACK REPEAT
1-🔁 SP
ⓑ
ALL REPEAT
🔁 SP

Press [REPEAT] before or during play.

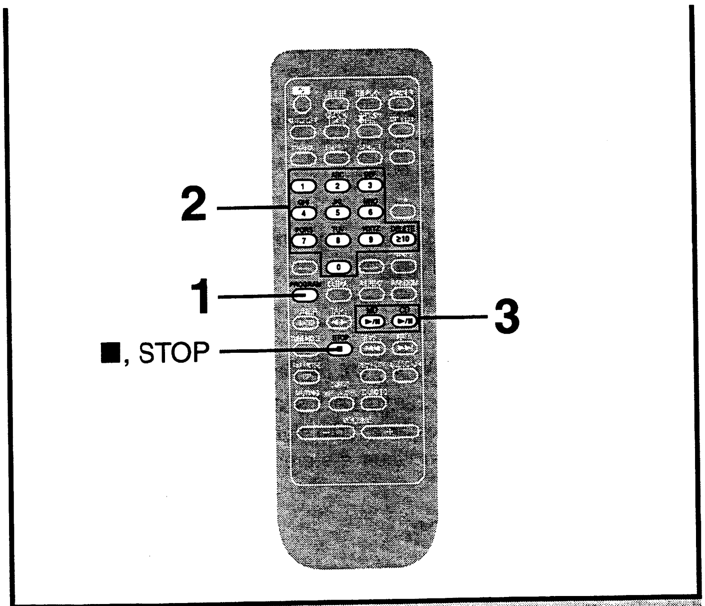
Each time you press the button:

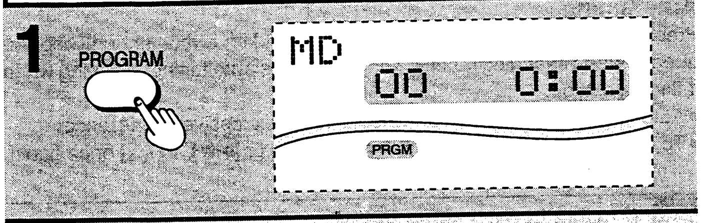
→ TRACK REPEAT (1-🔁)→ALL REPEAT(🔁)→REPEAT OFF

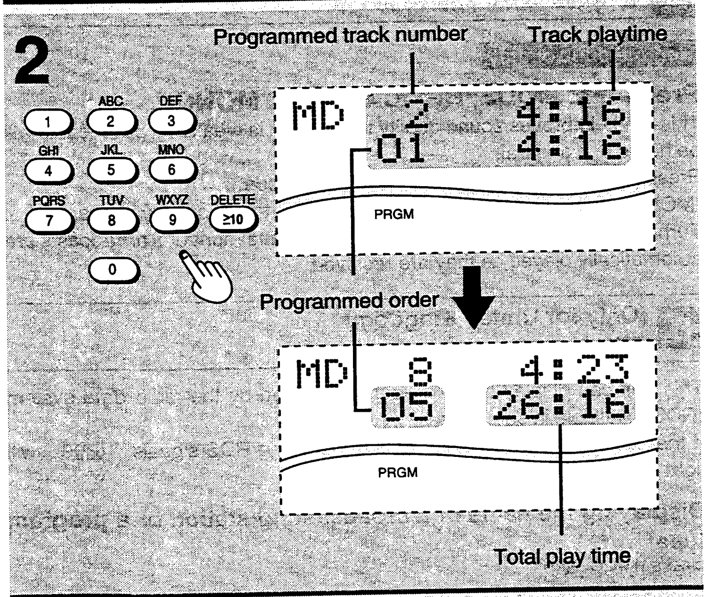
ⓐ TRACK REPEAT (1-🔁): Repeat only one track
ⓑ ALL REPEAT (🔁): Repeat all tracks

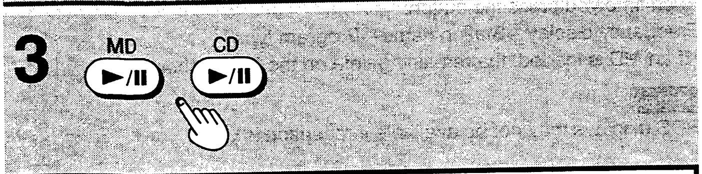
To cancel
Press [REPEAT] to clear "1-🔁" or "🔁".

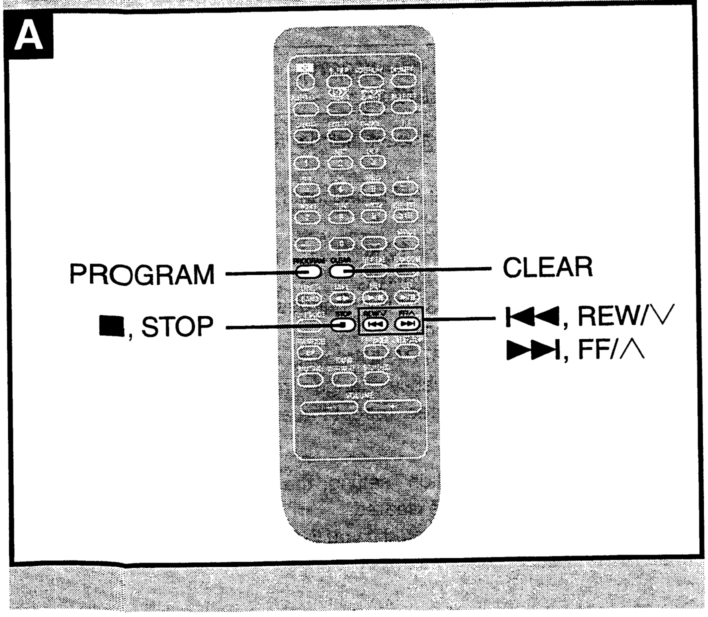
To repeat programmed tracks
① Program desired tracks (→ page 15).
② Press [REPEAT] to select "ALL REPEAT (🔁)" and start play.




1
PROGRAM
MD
00 0:00
PRGM


2
Programmed track number
Track playtime
ABC
DEF
GHI
JKL
MNO
PQRS
TUV
WXYZ
DELETE
1
2
3
4
5
6
7
8
9
≥10
0
MD 2 4:16
01 4:16
PRGM
Programmed order
MD 8 4:23
05 26:16
PRGM
Total play time




A
PROGRAM
CLEAR
■, STOP
I◄◄, REW/∨
►►I, FF/∧

Other MD and CD functions

Remote control only

Preparation:
Press [►/II, MD] or [►/II, CD] to select "MD" or "CD" as the source then press [■, STOP].

Program play

You can select up to 24 tracks to play in the order you choose.

1 **While stopped**
Press [PROGRAM].

2 **Enter the track number with the numbered buttons.**
For tracks numbered 10 and over, press [≥10] then the two digits.
For tracks numbered 100 and over, press [≥10] twice then the three digits (MD only).

Repeat this step to program the tracks in the required order.

3 **Press [►/II, MD] or [►/II, CD].**
All the selected tracks are played in the selected order.

A **Do the following while the disc is stopped and "PRGM" is on the display**

To cancel program play
Press [PROGRAM].
Programmed contents will be saved in memory.

To check the contents of the program
Press [I◄◄, REW/∨] or [►►I, FF/∧]. The track numbers and program positions are displayed in order.

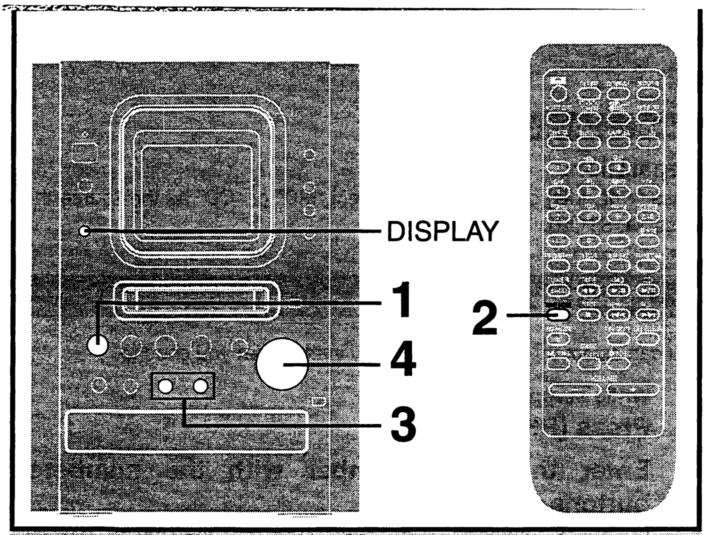
To add to the end of the program
Repeat step 2.

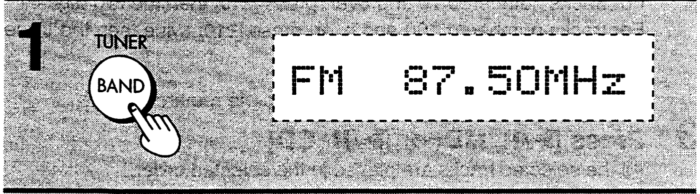
To clear all the tracks
Press [CLEAR].
"PRGM CLEAR" is displayed and all the tracks are cleared.

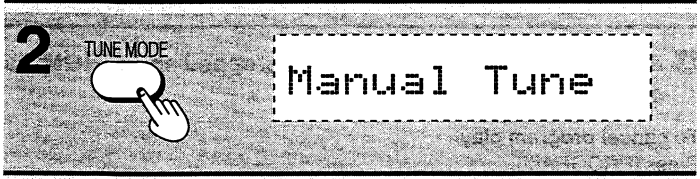
"PROGRAM FULL" is displayed
24 tracks have been programmed.

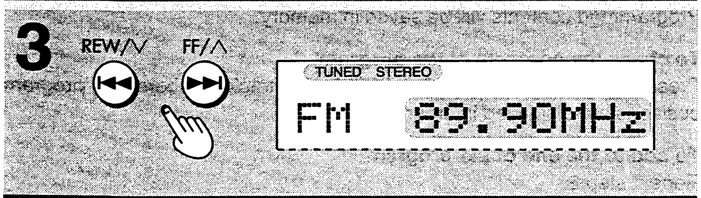
"––:––" is displayed
Total playing time for the tracks is over 249 minutes and 59 seconds. Tracks can be still programmed and played.

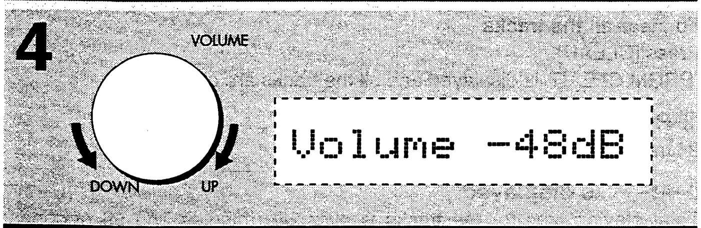
Note
- Skipping is done in the selected order in program play.
- You can search only within tracks in CD program mode.
- MD editing is not possible during program play.
- You can use random play with your program. Only the programmed tracks will be played, but in random order (→ page 14).

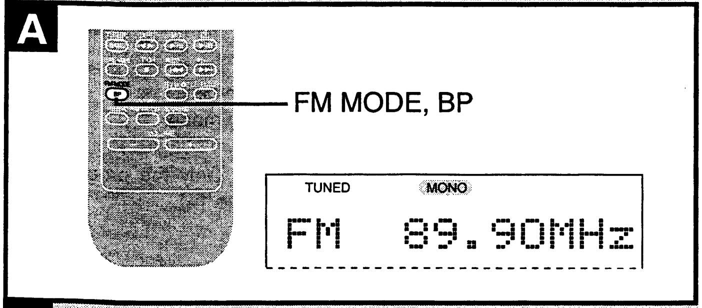


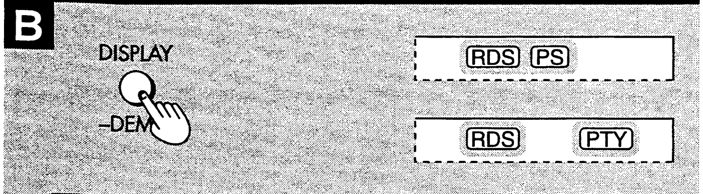












Program type displays

NEWS	VARIED	FINANCE	COUNTRY
AFFAIRS	POP M	CHILDREN	NATIONAL
INFO	ROCK M	SOCIAL A	OLDIES
SPORT	M.O.R M*	RELIGION	FOLK M
EDUCATE	LIGHT M	PHONE IN	DOCUMENT
DRAMA	CLASSICS	TRAVEL	TEST
CULTURE	OTHER M	LEISURE	ALARM
SCIENCE	WEATHER	JAZZ	

The radio: manual tuning

1. **Press [TUNER, BAND] to select "FM" or "AM".**
   The unit comes on automatically.
   Each time you press the button:
   FM⇄AM
2. **Press [TUNE MODE] on the remote control to select "Manual Tune".**
   Each time you press the button:
   Manual Tune⇄Preset Tune
3. **Press [|◀◀, REW/∨] or [▶▶|, FF/∧] to select the frequency of the required station.**
   "TUNED" is displayed when a radio station is tuned.
   "STEREO" is displayed when a stereo FM broadcast is being received.
4. **Adjust the volume.**

Auto tuning

Press and hold [|◀◀, REW/∨] or [▶▶|, FF/∧] for a moment until the frequency starts changing rapidly. The unit begins auto tuning, stopping when it finds a station.

- Auto tuning may not function when there is excessive interference.
- To cancel auto tuning, press [|◀◀, REW/∨] or [▶▶|, FF/∧] once again.

A If noise is excessive in FM

Remote control only

Press [FM MODE, BP] to display "MONO".

This mode improves sound quality if reception is weak, but broadcasts will be heard in monaural.
Press [FM MODE, BP] again to cancel the mode.
"MONO" goes out. MONO is also cancelled if the frequency is changed.
Turn off "MONO" for normal listening. Stereo and monaural broadcasts are automatically played as they are received.

B (Only for United Kingdom) RDS broadcasting

This unit can display the text data transmitted by the radio data system (RDS) available in some areas.
If the station you are listening to is transmitting RDS signals, " RDS " will light up on the display.

Displaying the name of a broadcasting station or a program type

Press [DISPLAY].
Each time you press the button:
Frequency display→Station name→Program type*
*If an MD is loaded, the remaining time on the MD is shown next.

Note

RDS displays may not be available if reception is poor.

*"M.O.R M"="Middle of the road music"

(Except for United Kingdom) About allocation settings

Each country allocates broadcast bands according to their particular needs.
This system can also receive AM broadcasts allocated in 10 kHz steps.

To change the step (9 kHz ↔ 10 kHz)

① Press and hold [TUNER, BAND].
After a few seconds the display changes to a flashing display of the current minimum frequency.
② Continue to hold [TUNER, BAND] down.
When the minimum frequency changes, release the button.
To return to the original step, repeat the above steps.

Note

- After changing the "allocation" setting, the frequencies you previously preset in the memory will be cleared.
- Sound is momentarily interrupted if you load/unload tapes while listening to an AM broadcast.

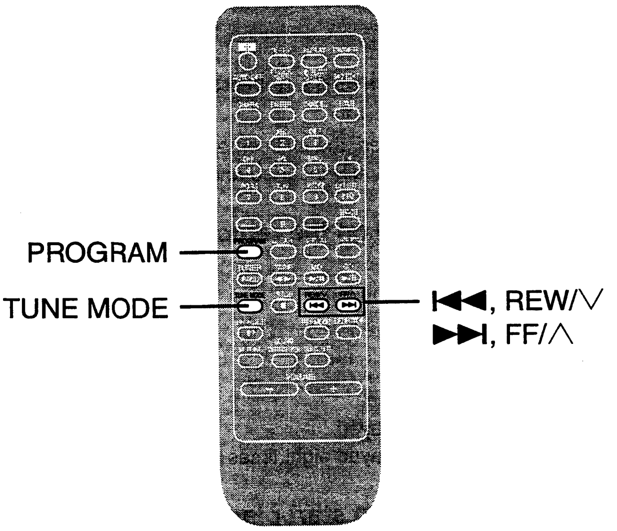
The radio: preset tuning

Remote control only

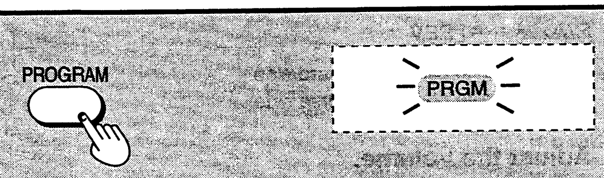
There are two methods of presetting stations.

Automatic presetting: All the stations the tuner can receive are preset.
Manual presetting: You can select the stations to preset and the order they are preset in.
Up to 15 stations each can be set in the FM and AM bands.

Preparation:
Press [TUNER, BAND] to select "FM" or "AM".


PROGRAM
TUNE MODE
⏮, REW/∨
⏭, FF/∧

A


PROGRAM
PRGM

A Automatic presetting

Do the following once each for FM and AM.

Preparation:
Tune to the frequency where presetting is to begin (→ page 16).

Press and hold [PROGRAM].

Release the button when the frequency begins to change.
The tuner presets all the stations it can receive into the channels in ascending order. When finished, the last station memorized is tuned in.

Manual presetting

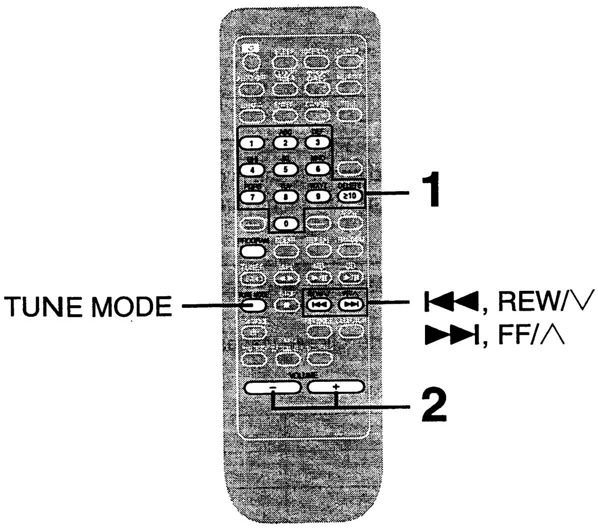
Preset the stations one at a time.

① Press [TUNE MODE] to select "Manual Tune".
② Press [⏮, REW/∨] or [⏭, FF/∧] to select the frequency of the required station.
③ Press [PROGRAM].
④ While "PRGM" is flashing (about 10 seconds)
Press [⏮, REW/∨] or [⏭, FF/∧] to select a channel.
⑤ Press [PROGRAM].

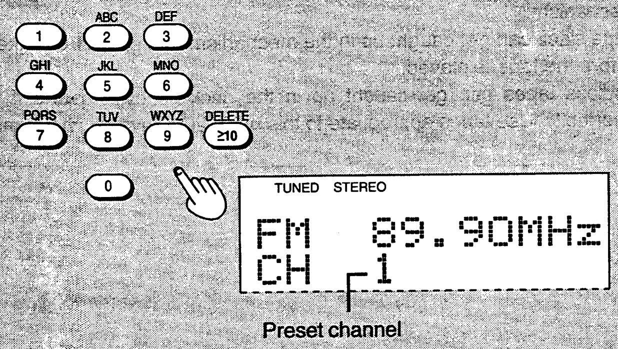
Repeat steps 2 to 5 to preset other stations.

The station occupying a channel is erased if another station is preset in that channel.

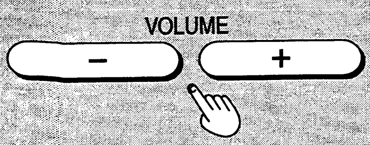
B


1
TUNE MODE
⏮, REW/∨
⏭, FF/∧
2

1


1
ABC 2
DEF 3
GHI 4
JKL 5
MNO 6
PQRS 7
TUV 8
WXYZ 9
DELETE ≥10
0
TUNED STEREO
FM 89.90MHz
CH 1
Preset channel

2



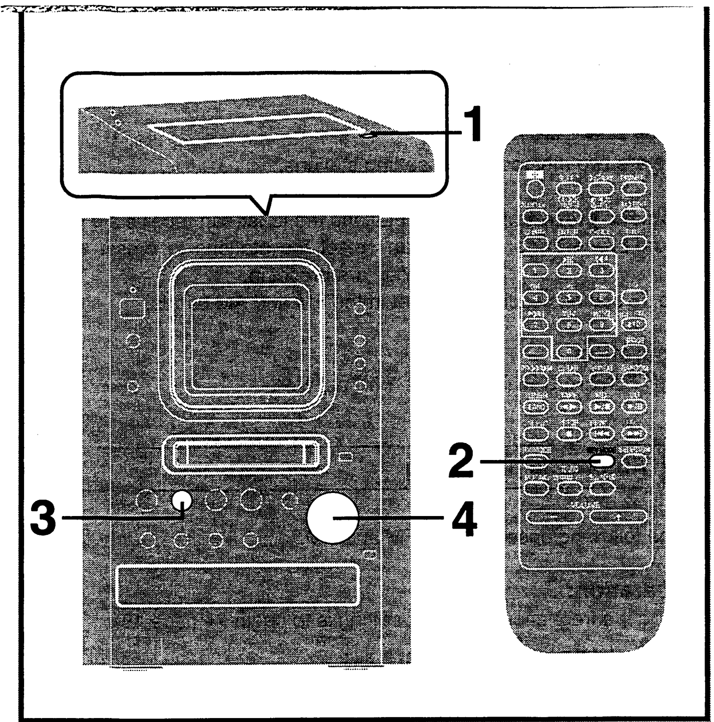
B Selecting channels

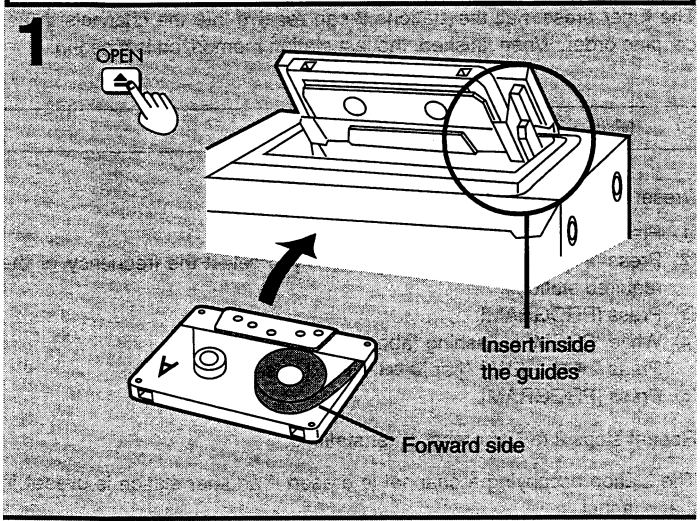
1 Press the numbered buttons to select the channel.
To select channel 10 or over
Press [≥10] then the two digits.

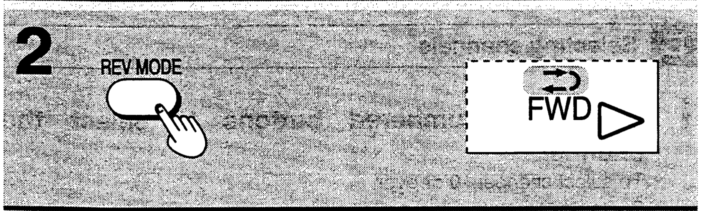
OR

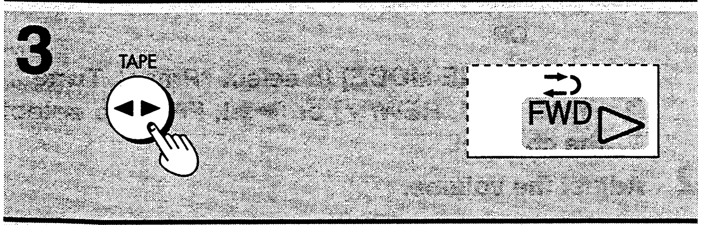
① Press [TUNE MODE] to select "Preset Tune".
② Press [⏮, REW/∨] or [⏭, FF/∧] to select the channel.

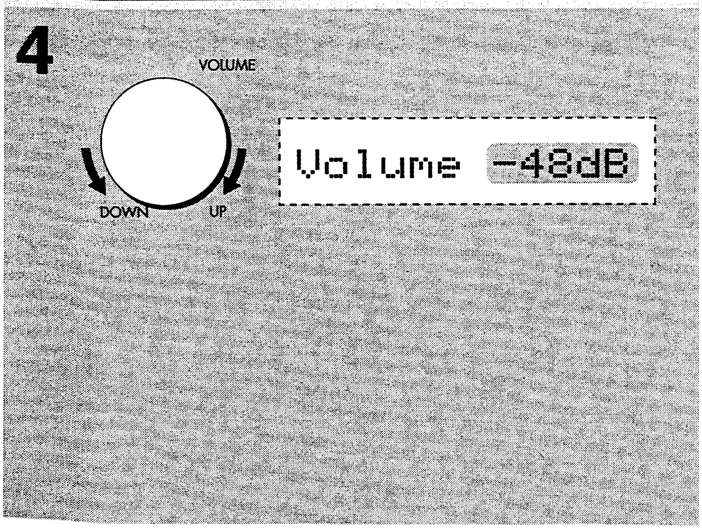
2 Adjust the volume.











Cassette tapes

1 Press [⏏, OPEN], insert a cassette with the tape facing in.

When the button is pressed, the unit comes on automatically.
Make sure the cassette is fully inserted and close the lid by hand.

2 Press [REV MODE] on the remote control to select the reverse mode.

Each time you press the button:

⇄ → ⇄⊃ → ⊂⇄⊃
↑__________|

⇄ : One side is played.
⇄⊃ : Both sides are played.
⊂⇄⊃ : Both sides are played eight times each.

3 Press [◀ ▶, TAPE] to start play.

Each time you press the button:

FWD ▷ ↔ ◁ REV

"FWD ▷" : to play the forward side
"◁ REV" : to play the reverse side

4 Adjust the volume.

To stop the tape
Press [■, STOP].

One touch play

When a cassette is inserted and the unit is off, press [◀ ▶, TAPE].
The unit comes on and starts play in the direction last selected.

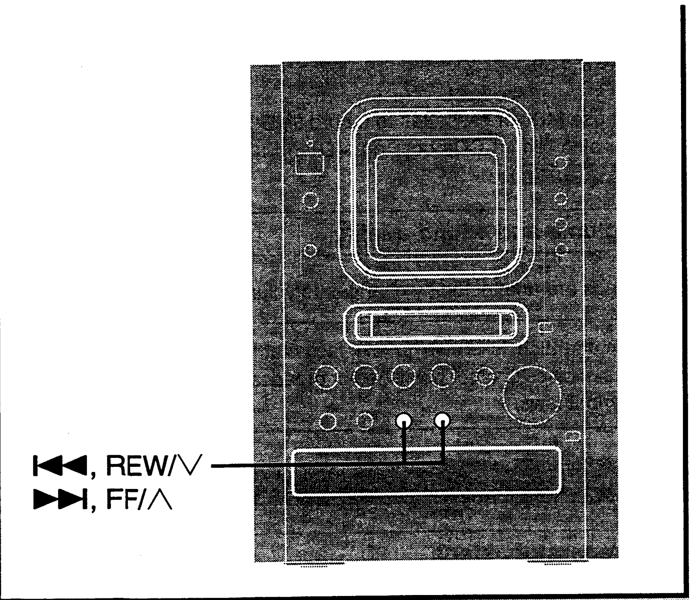
Cassette tape selection and care

The unit can correctly play the following tapes. It identifies the type automatically.

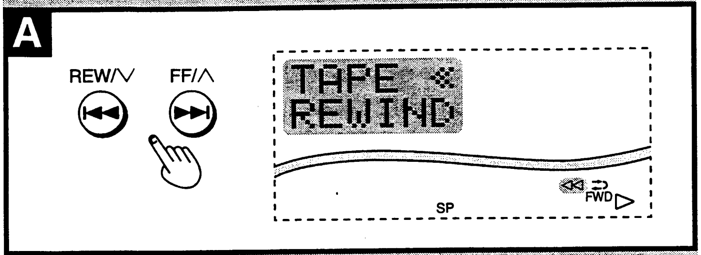
Normal position/TYPE I	✔
High position/TYPE II	✔
Metal position/TYPE IV	✔

- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Tape slack can get caught up in the mechanism and should be taken up before the tape is played.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly. Use tapes appropriate to this unit's auto-reverse mechanism.

Cassette tapes



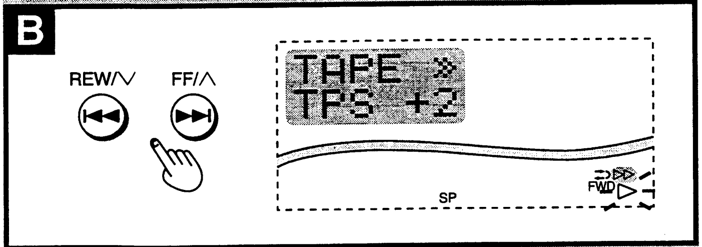
A Fast-forwarding and rewinding



Press [⏮, REW/∨] or [⏭, FF/∧] while the tape is stopped.

To rewind	To fast-forward
[⏮, REW/∨]	[⏭, FF/∧]

B Tape program sensor (TPS)



TPS finds the beginning of a track and resumes play from there.

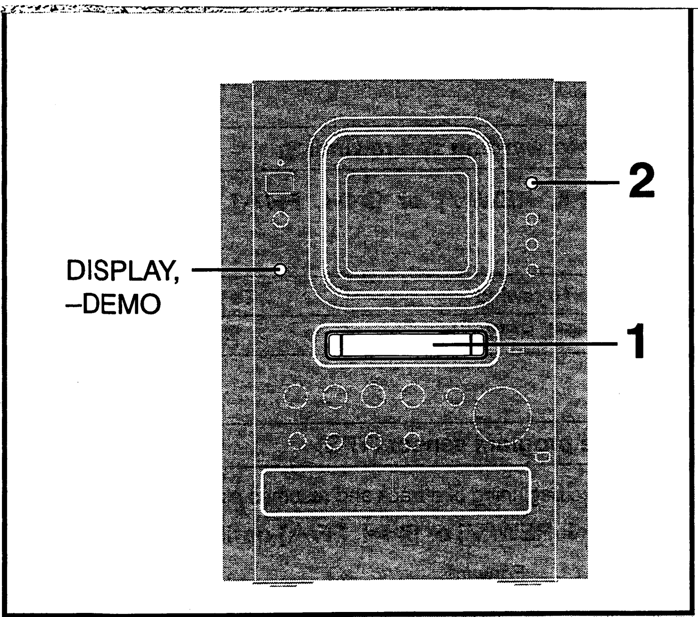
Press [⏮, REW/∨] or [⏭, FF/∧] during playback.

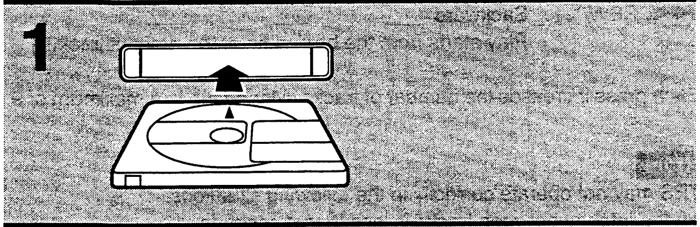
[⏭, FF/∧] : Forward
Play starts from the beginning of the next track.
[⏮, REW/∨] : Backward
Play starts from the beginning of the present track.

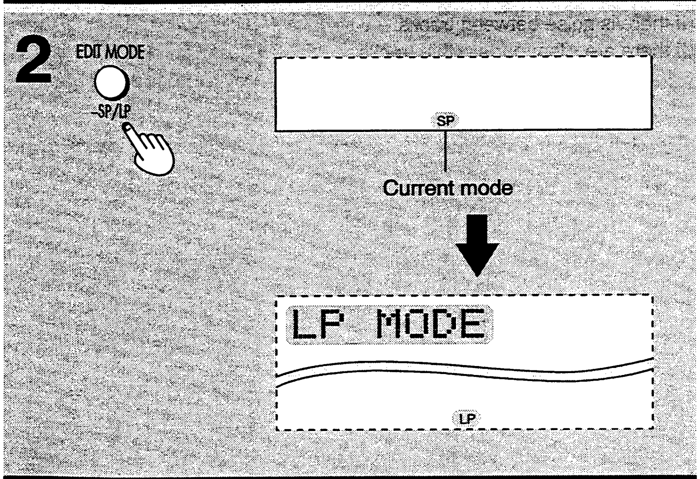
Each press increases the number of tracks skipped, up to a maximum of 9.

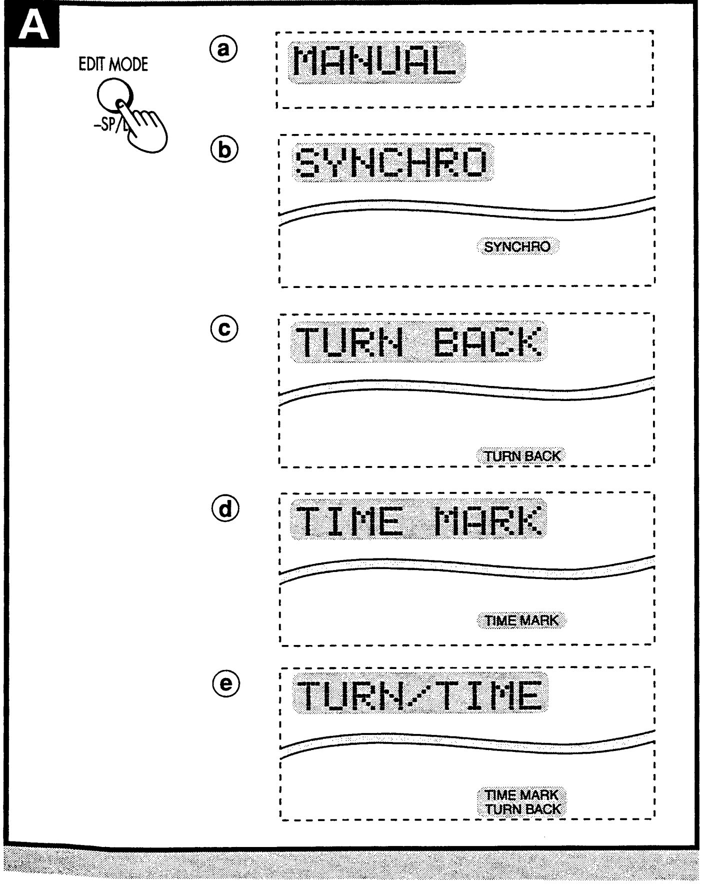
Note

TPS may not operate correctly in the following situations:
- If the interval between tracks is less than 4 seconds.
- If there is noise between tracks.
- If there are silent parts within tracks.









Before recording

You can use MDs or cassettes to record (MD REC TAPE REC).
You can also record CDs onto an MD and a cassette at the same time (MD&TAPE REC).

Volume and sound quality

Recordings are unaffected by changes to volume and sound quality.

Your attention is drawn to the fact that recording pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

For MD recording

Preparatory steps

Do these steps before each recording.

1 Insert an MD.

2 When selecting a source other than MD
Press and hold [EDIT MODE, –SP/LP] to select the SP/LP mode.

Each time you press and hold the button:
SP MODE ↔ LP MODE

SP MODE	:	standard recording (stereo)
LP MODE	:	long play recording (monaural) 148 minutes worth of material can be recorded onto a 74 minute MD.

To see how much time is left on an MD

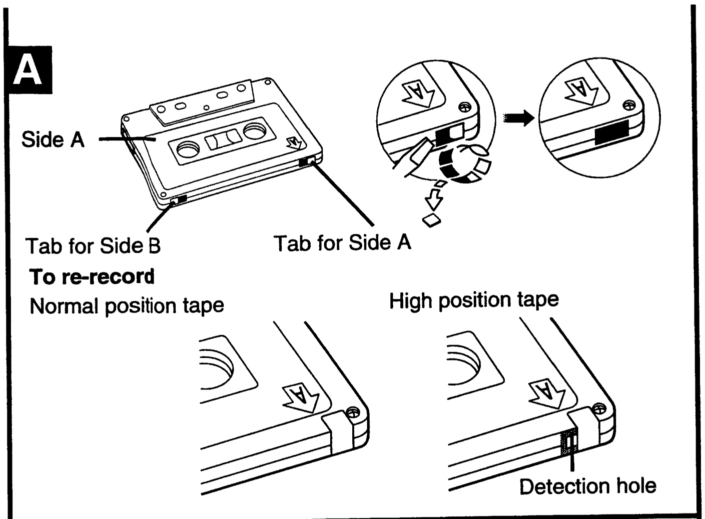
Press [DISPLAY, –DEMO] during MD stop mode until the remaining time is displayed.

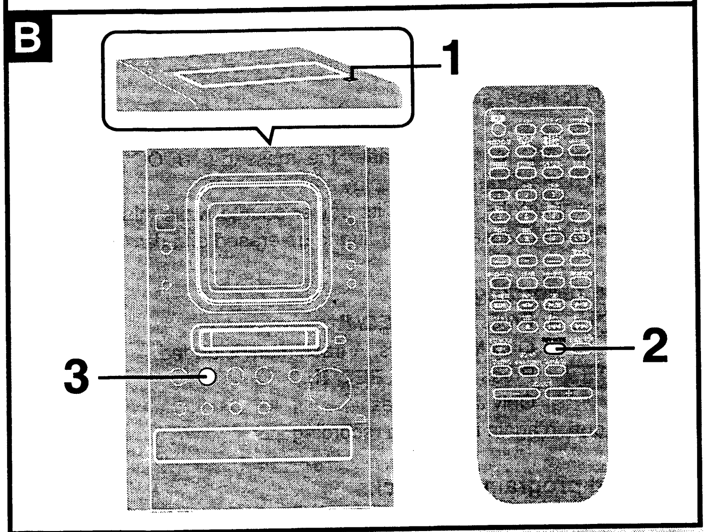
A MD recording mode

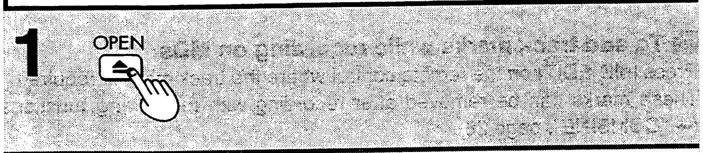
When recording any source except CD
Press [EDIT MODE] before pressing the recording button to select the mode.

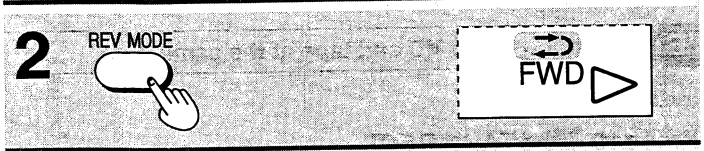
The modes you can choose depend on the source.

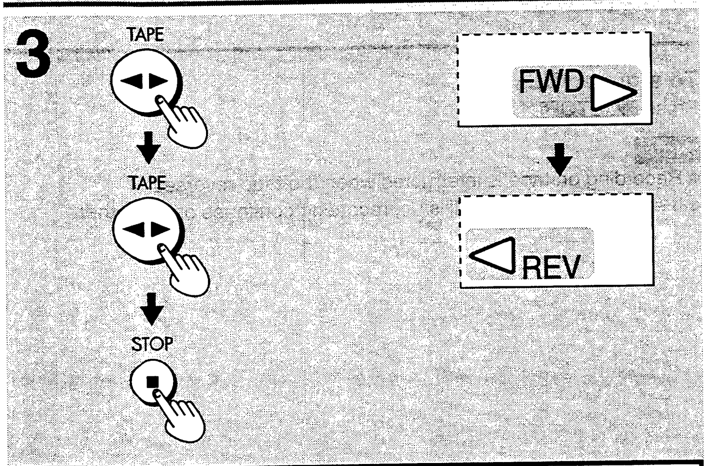
ⓐ MANUAL	:	Insert track marks manually.
ⓑ SYNCHRO	:	Recording starts automatically when you start play of the source, pauses if a 3-second silence is detected, then starts again when play starts. A track mark is added at the point recording starts. You cannot insert track marks manually.
ⓒ TURN BACK	:	Records sound received a few seconds before the recording button is pressed. This mode is useful when recording the radio. Track marks can be inserted manually.
ⓓ TIME MARK	:	Track marks inserted every five minutes. Track marks can also be inserted manually.
ⓔ TURN/TIME	:	A combination of turn back and time mark.

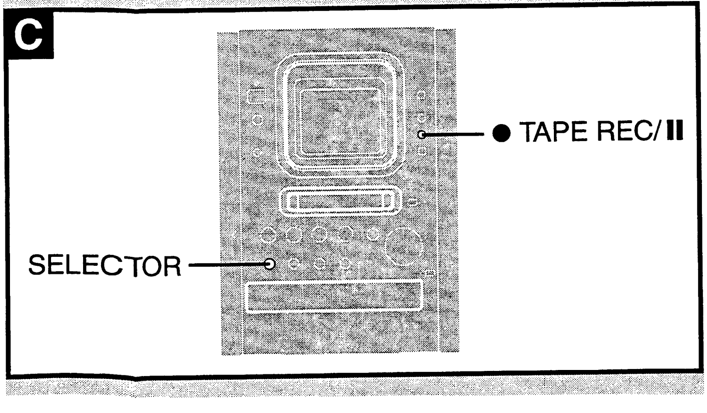

A
Side A
Tab for Side B
Tab for Side A
To re-record
Normal position tape
High position tape
Detection hole






2
REV MODE
⇄⊃
FWD ▷


3
TAPE
FWD ▷
TAPE
◁ REV
STOP


C
● TAPE REC/II
SELECTOR

Before recording

For tape recording

Selection of tapes for recording

The unit automatically identifies the type of tape.

Normal position/TYPE I	✔
High position/TYPE II	✔
Metal position/TYPE IV	×

Metal position tapes can be used, but the unit will not be able to record or erase them correctly.

A Erasure prevention for tapes

The illustration shows how to remove the tabs to prevent recording.
To record on the tape again, cover as shown, being careful not to cover the high position detection hole.

B Preparatory steps

Do these steps before each recording.
Wind up the leader tape so recording can begin immediately (unnecessary if auto CD editing).

1 Press [⏏, OPEN], insert a cassette with the tape facing in.
Make sure the cassette is fully inserted and close the lid by hand.

2 Press [REV MODE] on the remote control to select the reverse mode.
Each time you press the button:

⇄ → ⇄⊃ → ⊂⇄⊃
↑__________|

⇄ : One side records only.
⇄⊃ and ⊂⇄⊃ : Both sides record.
(forward side → reverse side)

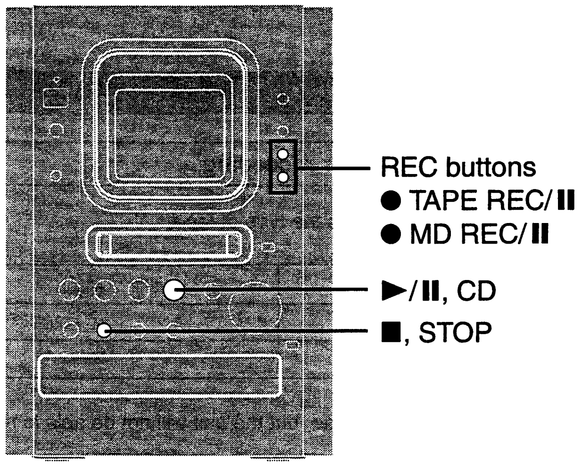
"⊂⇄⊃" automatically changes to "⇄⊃" when the REC buttons are pressed.

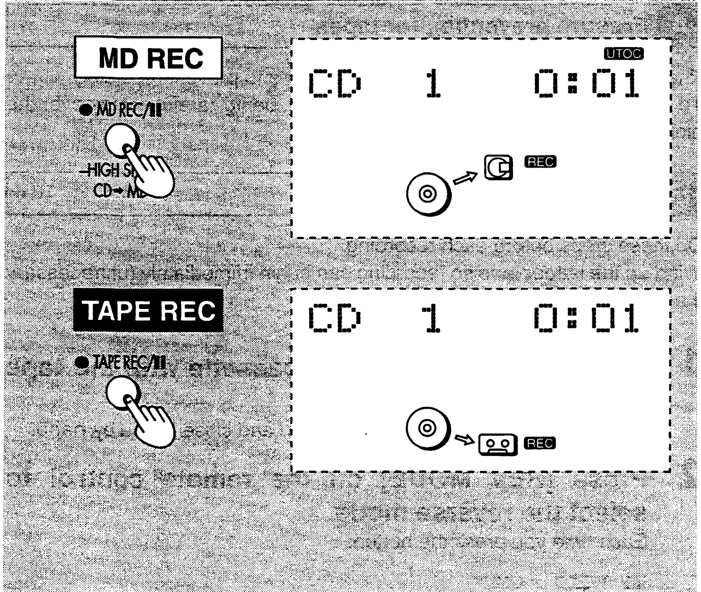
3 (Unnecessary with auto edit recording, ➡ page 23)
Set the tape direction.
"FWD ▷": To record on the forward side
"◁ REV" : To record on the reverse side

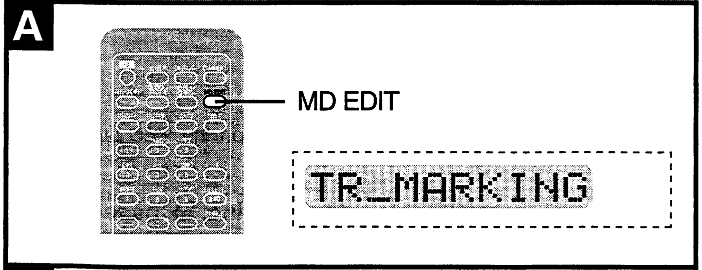
To change the direction
Press [◀▶, TAPE] twice and then [■, STOP].

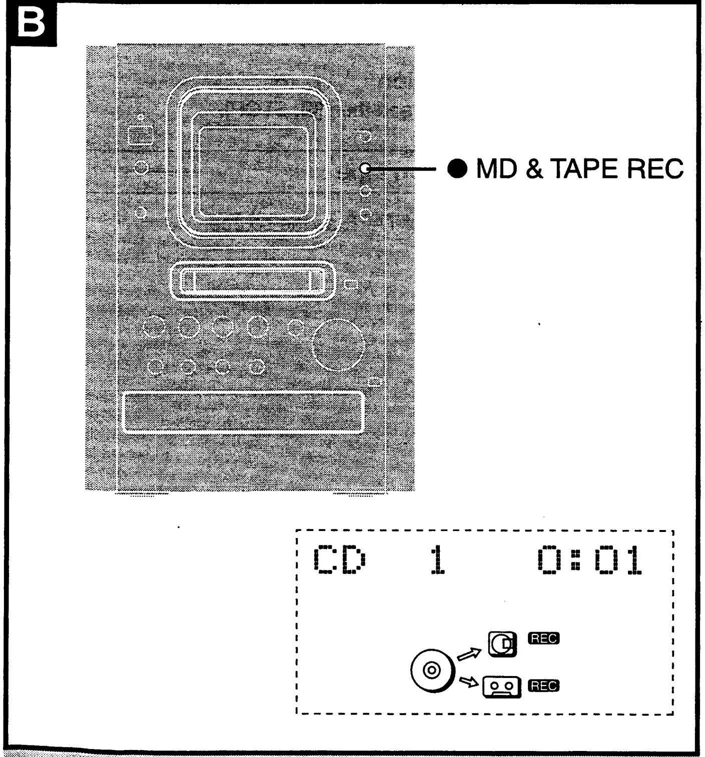
C Erasing recordings on tape

① Press [SELECTOR] to select TAPE as the source.
② Select the reverse mode.
③ Press [● TAPE REC/II].


REC buttons
● TAPE REC/II
● MD REC/II
►/II, CD
■, STOP


MD REC
● MD REC/II
-HIGH S
CD→M
UTOC
CD 1 0:01
REC
TAPE REC
● TAPE REC/II
CD 1 0:01
REC


A
MD EDIT
TR_MARKING


B
● MD & TAPE REC
CD 1 0:01
REC
REC

Recording CDs

Normal recording

MD REC **TAPE REC**

Preparation:

Do the preparatory steps. (→ pages 20 and 21).
Insert the CD (→ page 13) and press [►/II, CD] to select CD as the source then press [■, STOP].

Press the REC button.

MD REC : Press [● MD REC/II].
TAPE REC : Press [● TAPE REC/II].

Recording starts automatically.

To stop recording

Press [■, STOP].
CD and MD (or tape) stop.

MD REC

Recording on MD is complete after the message "UTOC Writing" and " UTOC " stops flashing on the display.
Do not disconnect the unit from its power source while this message is flashing. This can cause the recording to be erased and damage the disc.

To pause recording

MD REC : Press [● **MD REC/II**].
Only MD pauses. A track mark is added.
TAPE REC : Press [● **TAPE REC/II**].
Only tape pauses.
Press the button again to resume recording.

To record programmed tracks

Program tracks (→ page 15), then press the REC button.

A To add track marks while recording on MDs

Press [MD EDIT] on the remote control where the track mark is required.
These marks can be removed after recording with the editing functions (→ "COMBINE", page 28).

B Recording CD to MD and tape at the same time

MD&TAPE REC

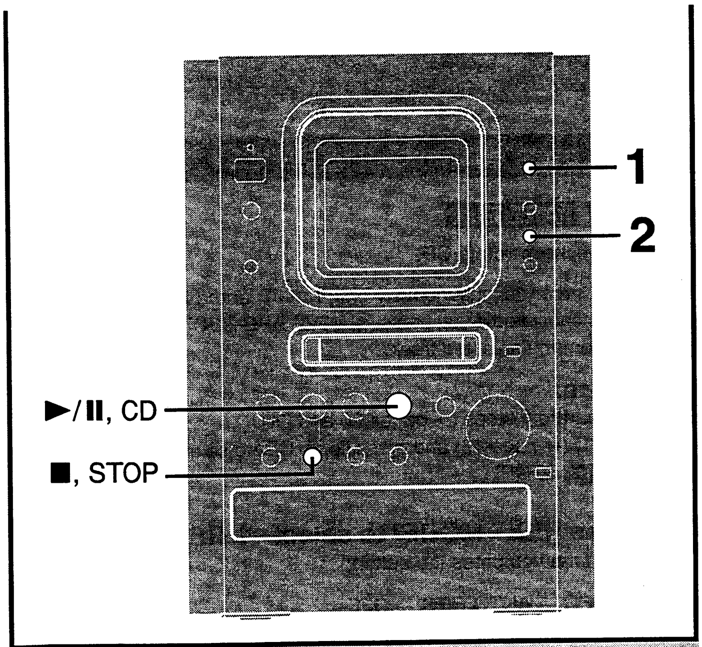
Press [● MD&TAPE REC].

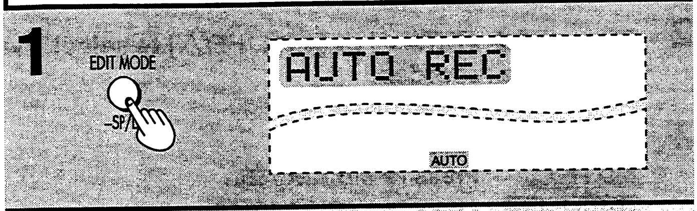
To stop recording

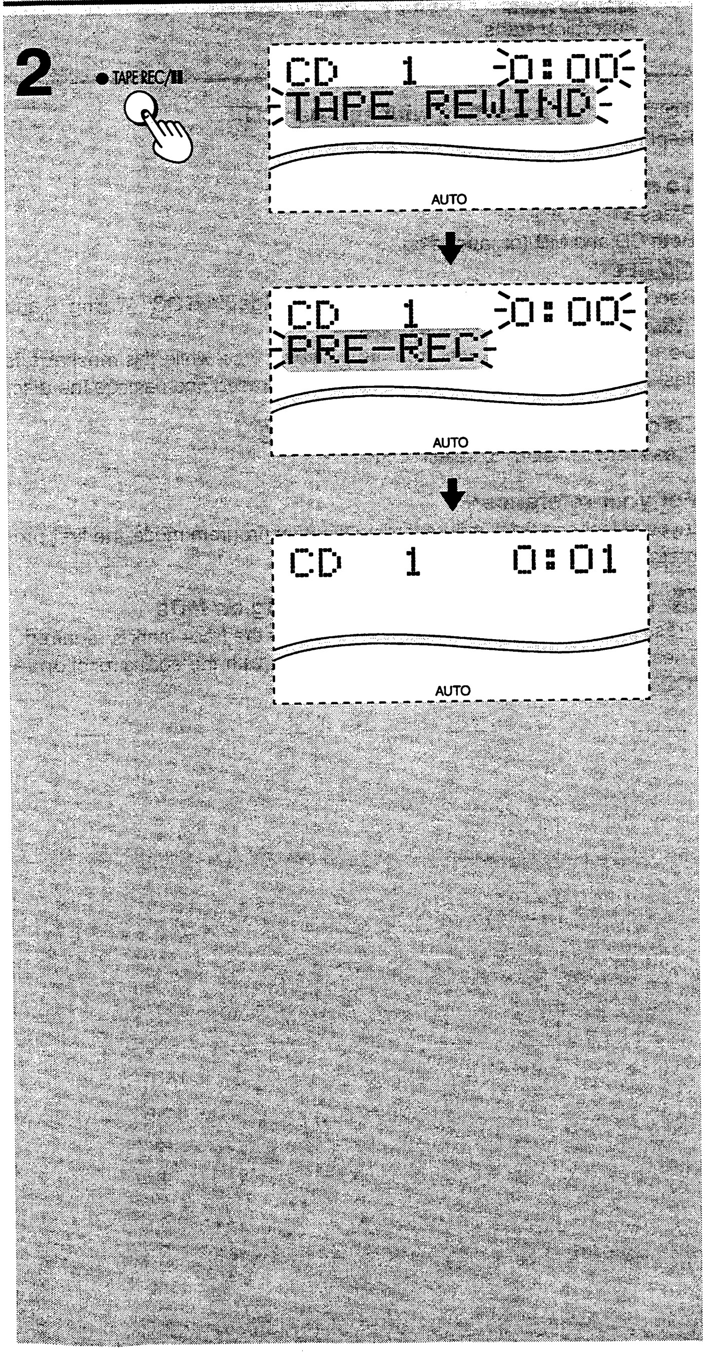
Press [■, STOP].

Note

- Recording on tape is interrupted when the tape reverses.
- If either the MD or tape fills up, recording continues on the other.







Recording CDs

Auto edit recording (AUTO REC)

TAPE REC

- This function automatically records all tracks on the CD onto a tape as long as the remaining time on the tape allows.
- Recording begins from the beginning of the forward side.
  The tape automatically rewinds.
- A track incompletely recorded on the forward side is recorded again on the reverse side.
- The cassette must have tabs for both sides.

Preparation:

Do the preparatory steps (➞ page 21).
Insert CD (➞ page 13) and press [▶/II, CD] to select CD as the source then press [■, STOP].

1 Press [EDIT MODE] to select "AUTO REC".

Each time you press the button:

1-REC → AUTO REC → OFF
↑_________________|

2 Press [● TAPE REC/II].

The tape automatically rewinds and the tape direction is displayed as "FWD ▷".

Recording automatically starts.
Auto edit recording is cancelled after recording.

To stop recording

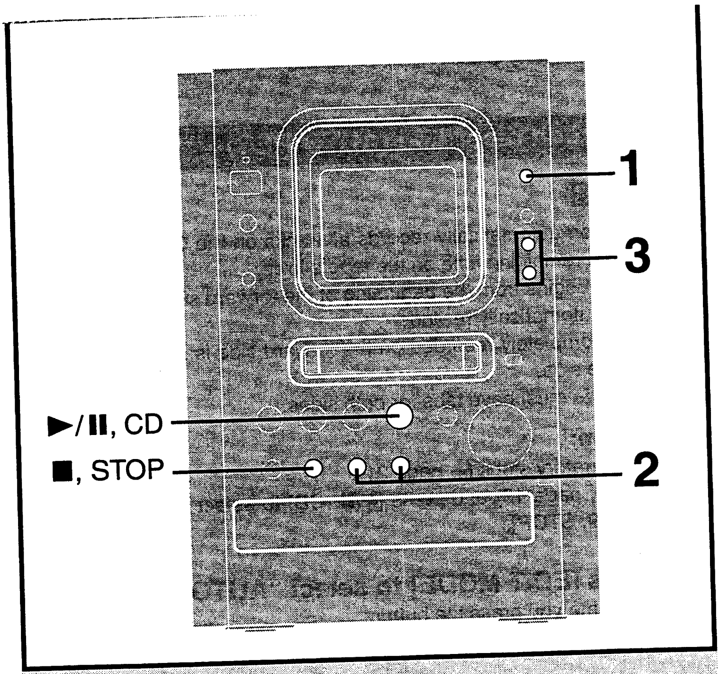
Press [■, STOP].
Both CD and tape stop.

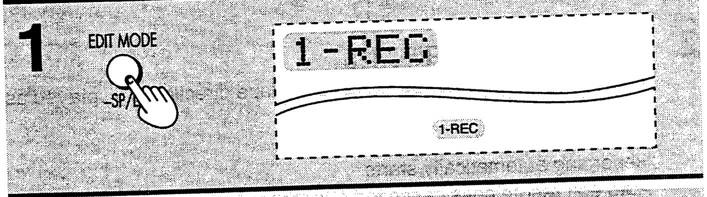
To record programmed tracks

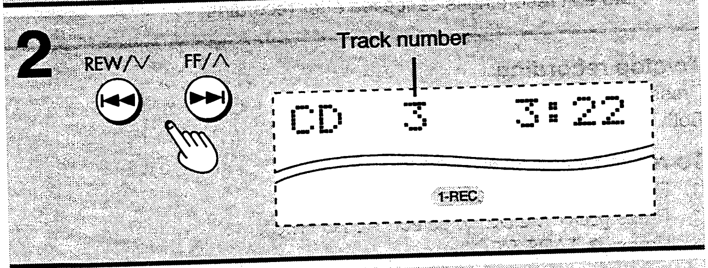
① Program tracks (➞ page 15).
② Press [EDIT MODE] to select "AUTO REC".
③ Press [● TAPE REC/II].

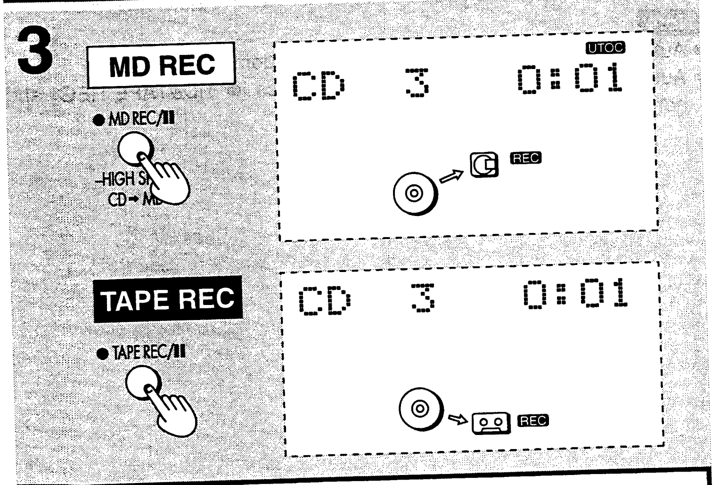
Note

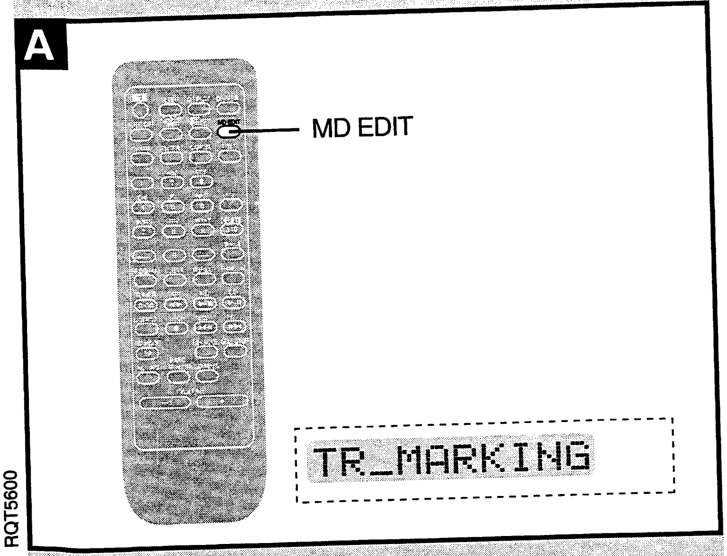
- Auto edit recording cannot be used with random and repeat play.
- Auto edit recording is cancelled if you press [● MD&TAPE REC] and normal recording starts.


1
3
►/II, CD
■, STOP
2


1
EDIT MODE
-SP/
1-REC
1-REC


2
REW/∨
FF/∧
Track number
CD 3 3:22
1-REC


3
MD REC
● MD REC/II
-HIGH S
CD→ M
UTOC
CD 3 0:01
REC
TAPE REC
● TAPE REC/II
CD 3 0:01
REC


A
MD EDIT
TR_MARKING

One track edit recording (1-REC)

MD REC **TAPE REC**

Records one track from a CD.

You cannot record simultaneously onto an MD and a tape. One track edit recording is cancelled if you press [● MD&TAPE REC] and normal recording starts from the selected track.

Preparation:
Do the preparatory steps (→ pages 20 and 21).
Insert the CD (→ page 13) and press [►/II, CD] to select CD as the source then press [■, STOP].

1. **Press [EDIT MODE] to select "1-REC".**
   Each time you press the button:
   1-REC → AUTO REC → OFF
   ↑_______________________|
2. **Press [|◄◄, REW/∨] or [►►|, FF/∧] to select the track to be recorded.**
   Unnecessary when recording the first track.
3. **Press the REC button.**
   MD REC : **Press [● MD REC/ II].**
   TAPE REC : **Press [● TAPE REC/ II].**
   Recording starts.

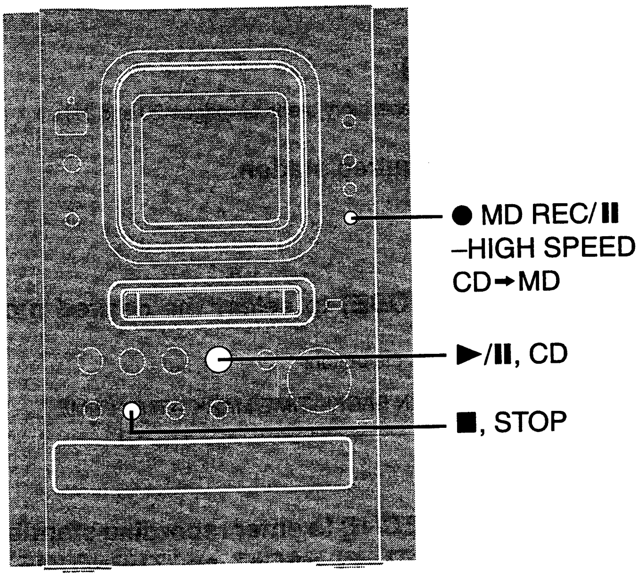
To continue recording with another CD
Replace the CD and repeat steps 2 and 3.

To stop recording
Press [■, STOP].
Both CD and MD (or tape) stop.
MD REC
Recording is complete after the message "UTOC Writing" and " UTOC "stops flashing on the display.
Do not disconnect the unit from its power source while this message is flashing. This can cause the recording to be erased and damage the disc.

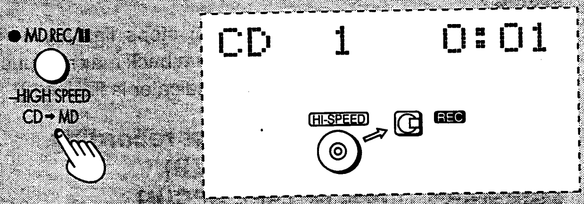
To cancel the one track edit recording
Press [EDIT MODE] to select "OFF".

For your reference
If you select one track edit recording when in program mode, the first programmed track will be recorded.

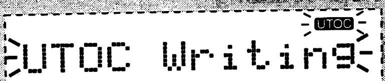
A To add track marks while recording on MDs
Press [MD EDIT] on the remote control where the track mark is required.
These marks can be removed after recording with the editing function (→ "COMBINE", page 28).



1



A



Recording CDs

High speed recording

MD REC

Preparation:

Do the preparatory steps (→ page 20).
Insert the CD (→ page 13) and press [►/❚❚, CD] to select "CD" as the source then press [■ , STOP].

Press and hold [● MD REC/❚❚, –HIGH SPEED CD → MD] to start recording.

" UTOC " lights when recording begins.

When recording is finished

When the CD finishes the MD also stops.
A The message "UTOC Writing" and " UTOC " stop flashing on the display.

To stop recording

Press [■, STOP].
Both CD and MD stop.

Note

You cannot use high-speed recording with program play, repeat play, or random play.

For your reference

- You can use high-speed recording with "1-REC".

Limitations on high-speed recording

This unit uses a copy management system to limit the use of high-speed recording to protect the rights of the producers of music software.

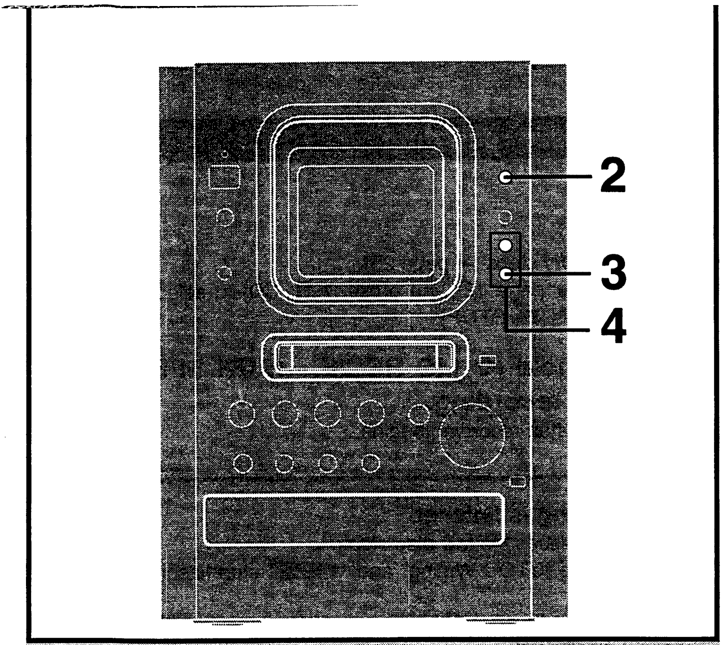
■ **You cannot use high-speed recording to record the same track twice within 74 minutes of starting recording.**

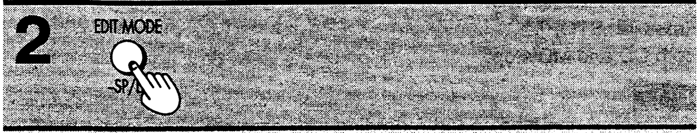
- Even if you stop recording part way through, you cannot start recording the same track again.
- If, for example, you complete recording in 20 minutes, you must wait a further 54 minutes before using high-speed recording to record the track again. You can record the track at normal speed.

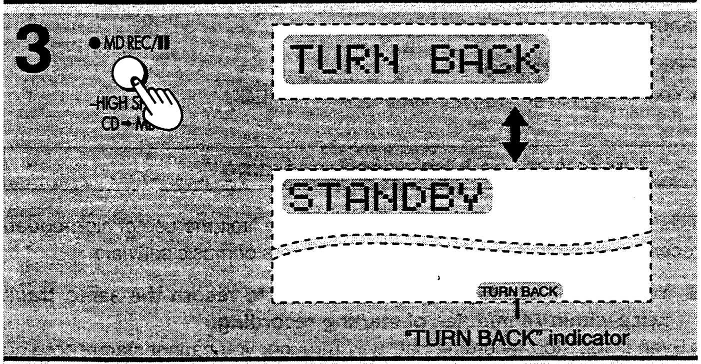
■ **You can record up to 50 tracks.**

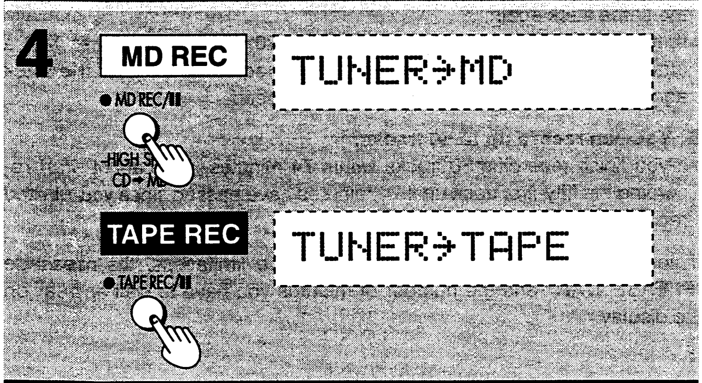
- If you finish recording 50 tracks within 74 minutes, you cannot start recording the fifty-first track until 74 minutes have passed since you started recording the first track.

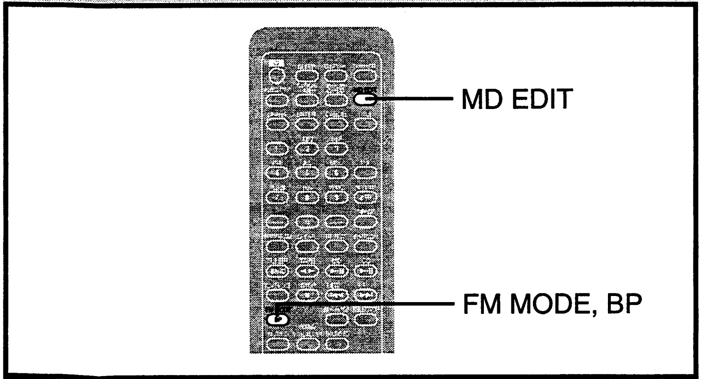
If you try to start recording within the above limitations, the message "PLEASE WAIT" and the number of minutes you have to wait appear on the display.

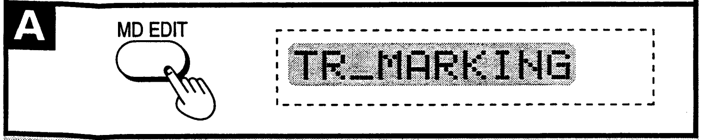


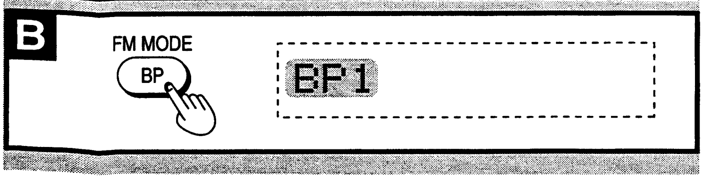

2
EDIT MODE
-SP/LP


3
● MD REC/II
-HIGH SPEED
CD→MD
TURN BACK
STANDBY
TURN BACK
"TURN BACK" indicator


4
MD REC
● MD REC/II
-HIGH SPEED
CD→MD
TUNER→MD
TAPE REC
● TAPE REC/II
TUNER→TAPE


MD EDIT
FM MODE, BP


A
MD EDIT
TR_MARKING


B
FM MODE
BP
BP1

Recording the radio

MD REC **TAPE REC**

Preparation: Do the preparatory steps (→ pages 20 and 21).

1 Tune to the required station.

(→ pages 16 and 17)

MD REC only

2 Press [EDIT MODE] to select the desired mode.

(→ page 20)
Each time you press the button:

MANUAL→TURN BACK→TIME MARK→TURN/TIME
↑___________________________________|

MD REC only

3 Press [● MD REC/ II] to enter recording standby if you selected "TURN BACK" or "TURN/TIME" in step 2.

Note

Wait until the "TURN BACK" indicator stops flashing before proceeding to step 4 to start recording. (Turn back may not function correctly if recording is started while the indicator is flashing.)

4 Press the REC button to start recording.

MD REC : Press [● MD REC/ II].
TAPE REC : Press [● TAPE REC/ II].

To stop recording

Press [■, STOP].

MD REC

Recording is complete after the message "UTOC Writing" and " UTOC " stops flashing on the display.

Do not disconnect the unit from its power source while this message is flashing. This can cause the recording to be erased and damage the disc.

To pause recording

MD REC : Press [● MD REC/ II].
A track mark is added.
TAPE REC : Press [● TAPE REC/ II].
Press the button again to resume recording.

A To add track marks while recording on MDs

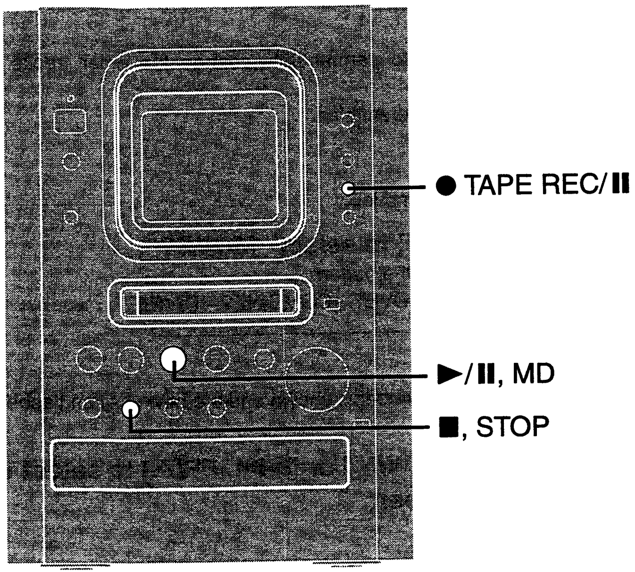
Press [MD EDIT] on the remote control where the track mark is required. These track marks can be removed after recording with the editing function (→ "COMBINE", page 28).

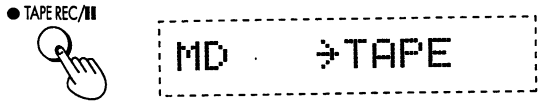
B To reduce noise while tape recording an AM broadcast (Beat proof function)

Press [FM MODE, BP] on the remote control.

Each time the button is pressed: BP1 ↔ BP2
Select the position where there is less noise.

A





A Recording MDs on cassette tapes

TAPE REC

Preparation:
Do the preparatory steps (→ page 21).
Insert the MD (→ page 12) and press [▶/II, MD] to select MD as the source then press [■, STOP].

Press [● TAPE REC/ II].

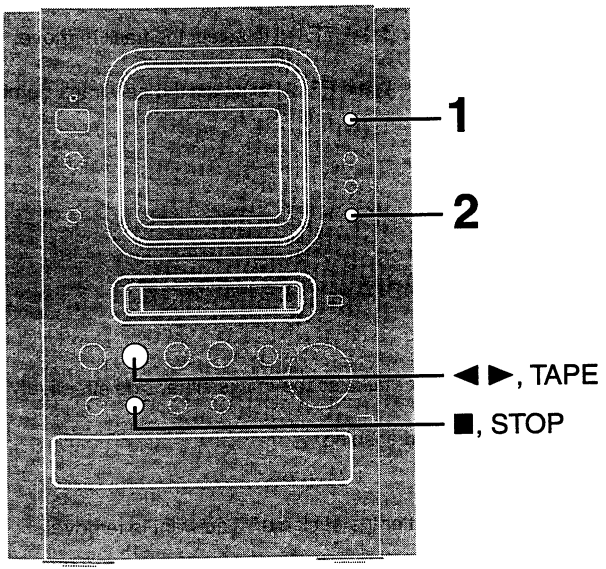
Recording automatically starts.

To stop recording
Press [■, STOP].
Both MD and tape stop.

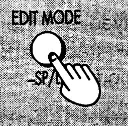
To pause recording
Press [● TAPE REC/ II].
Only tape pauses.
Press [● TAPE REC/ II] again to resume recording.

To record programmed tracks
Program tracks (→ page 15), then press [● TAPE REC/ II].

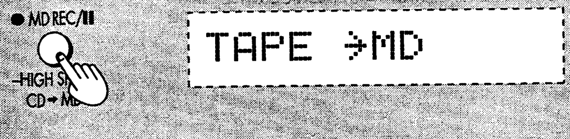
B



1



2



B Recording cassette tapes on MDs

MD REC

Preparation:
Do the preparatory steps (→ page 20).
Insert the cassette tape (→ page 18) and press [◀ ▶, TAPE] to select tape as the source then press [■, STOP].

1 Press [EDIT MODE] to select MD recording mode.

(→ page 20)
Each time you press the button:
MANUAL ↔ TIME MARK

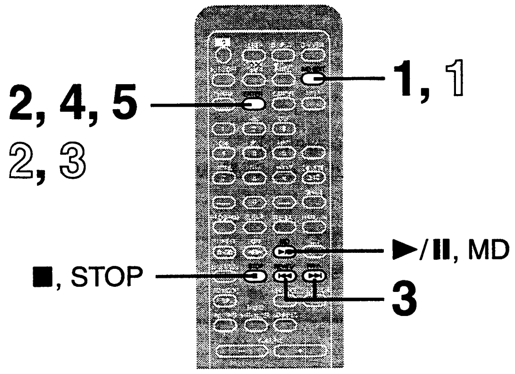
2 Press [● MD REC/II].

Recording automatically starts.

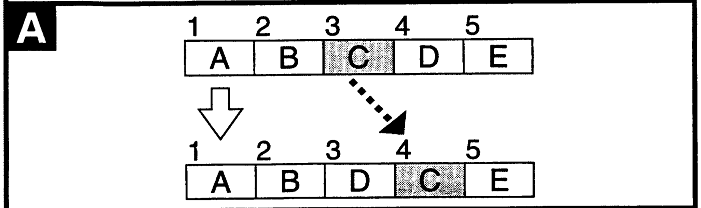
To stop recording
Press [■, STOP].
Both MD and tape stop.
Recording is complete after the message "UTOC Writing" and "UTOC" stops flashing on the display.
Do not disconnect the unit from its power source while this message is flashing. This can cause the recording to be erased and damage the disc.

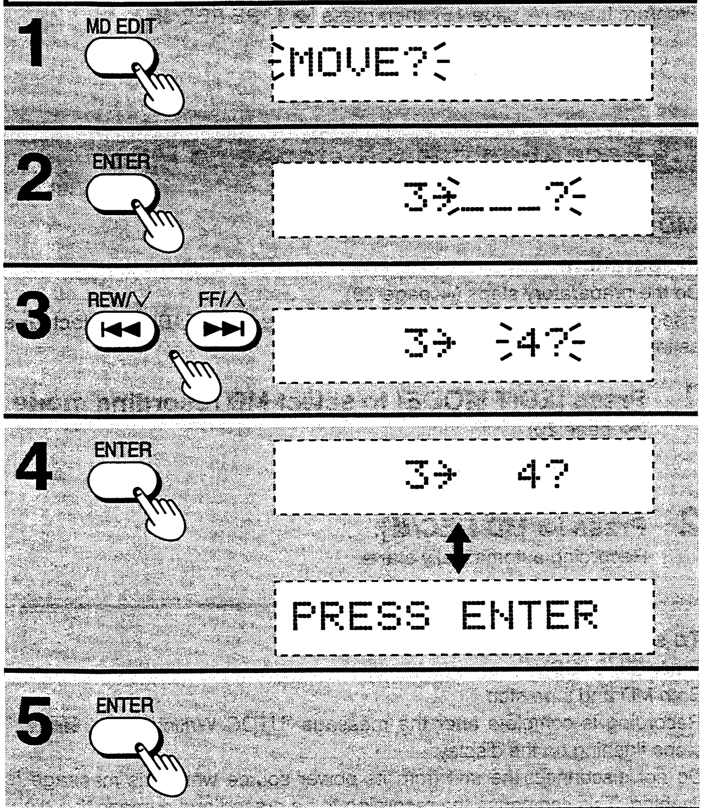
To pause recording
Press [● MD REC/II].
Only MD pauses. A track mark is added.
Press [● MD REC/II] again to resume recording.

To add track marks while recording
Press [MD EDIT] on the remote control where the track mark is required. These marks can be removed after recording with the editing function. (→ "COMBINE", page 28).

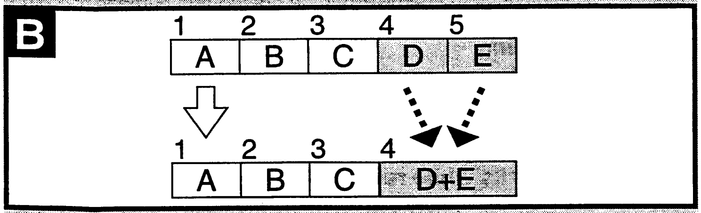


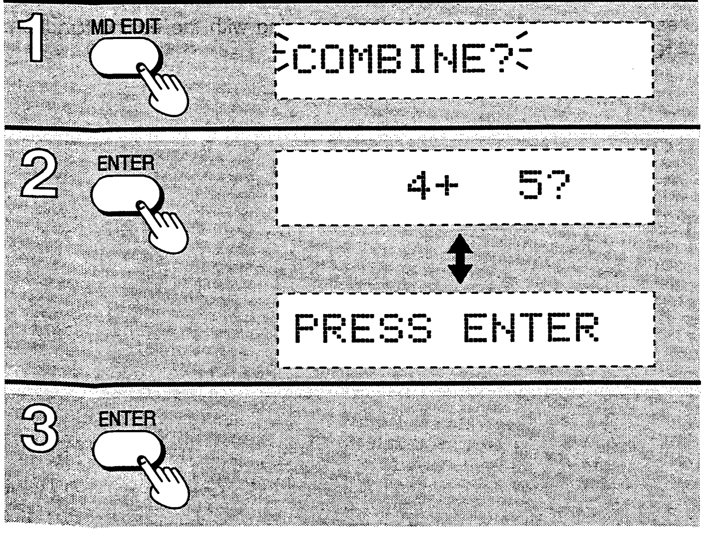
A





B





MD editing

A Moving tracks—MOVE

Remote control only

This function allows you to permanently change the order tracks are played in.

Make sure the disc is record enabled.

Preparation:

Insert the MD (→ page 12).

Play the track you want to move.

1 Press [MD EDIT] to select "MOVE?".

Each time you press the button:

TRACK ERASE?→MOVE?→COMBINE?→DIVIDE?

2 Press [ENTER].

The track's current number is shown and the new position flashes to the right of it.

3 Press [◀◀, REW/∨] or [▶▶I, FF/∧] to select the new track number.

4 Press [ENTER].

The old track number and new track number are displayed.

5 Press [ENTER] to confirm the new track number.

Play stops and "UTOC Writing" and " UTOC " flash on the display. When this stops flashing, the new track number has been entered.

To cancel part way through

Press [■, STOP] or [CANCEL].

To move the track while the disc is stopped

① Press [▶/II, MD] to select "MD" as the source then press [■, STOP].
② Press [MD EDIT] to select "MOVE?".
③ Press [ENTER].
④ Press [I◀◀, REW/∨] or [▶▶I, FF/∧] to select the track to move.
⑤ Press [ENTER].
⑥ Press [I◀◀, REW/∨] or [▶▶I, FF/∧] to select the new track number.
⑦ Press [ENTER].
⑧ Press [ENTER].

MD editing

B Combining tracks—COMBINE

Remote control only

This function removes track marks so the tracks either side effectively become one track.

Make sure the disc is record enabled.

Preparation:

Insert the MD (→ page 12).

Play the track that comes after the track mark you want to remove.

1 Press [MD EDIT] to select "COMBINE?".

Each time you press the button:

TRACK ERASE?→MOVE?→COMBINE?→DIVIDE?

2 Press [ENTER].

The track numbers to be combined are displayed, and the unit plays a segment of starting 8 seconds before the old track mark and continuing 8 seconds after it (16 seconds in LP mode).

3 Press [ENTER] to confirm the combination.

Play stops and "UTOC Writing" and " UTOC " flashes on the display. When this stops flashing the track mark has been removed and the two tracks now are counted as one.

(Continued on next page)

MD editing

Combining tracks—COMBINE

To cancel part way through

Press [■, STOP] or [CANCEL].

To divide the tracks again

Use DIVIDE (→ see below).

To combine tracks while the disc is stopped

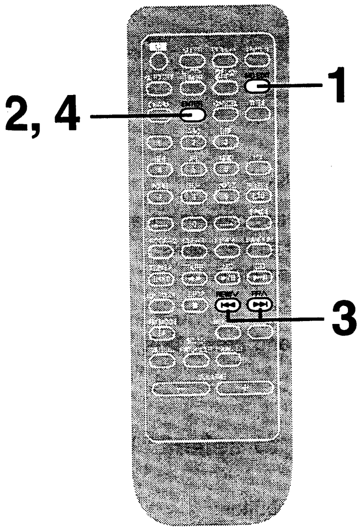
① Press [▶/II, MD] to select "MD" as the source then press [■, STOP].
② Press [MD EDIT] to select "COMBINE?".
③ Press [ENTER].
④ Press [I◀◀, REW/∨] or [▶▶I, FF/∧] to select which pair of tracks to combine.
⑤ Press [ENTER].
⑥ Press [ENTER].

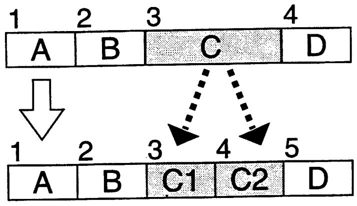
Note

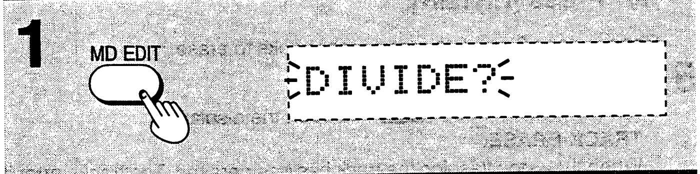
- If you combined titled tracks, the combined track retains only the title of the first track.
- You cannot combine a track recorded in SP mode with a track recorded in LP mode.

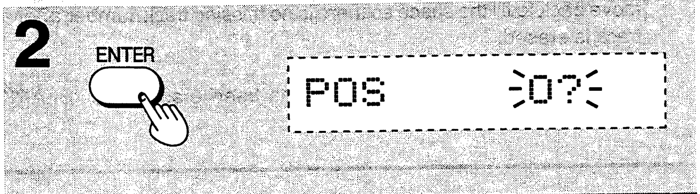
MD editing

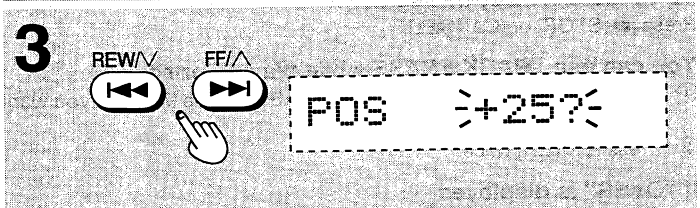
Dividing tracks—DIVIDE

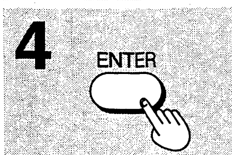












Remote control only

This function allows you to manually add track marks.
You can edit a recording of a radio program or divide a symphony into its separate movements.
Adding track marks will not interrupt sound.

Make sure the disc is record enabled.

Preparation:

Insert the MD (→ page 12) and play the track you want to divide.

1 Press [MD EDIT] to select "DIVIDE?".

Each time you press the button:

TRACK ERASE?→MOVE?→COMBINE?→DIVIDE?

2 Press [ENTER] at the approximate point you want the track mark to go.

A 4 second segment of the track, beginning at the selected point, is played repeatedly. (If the track is recorded in LP mode, approximately 8 seconds.)

3 Press [I◀◀, REW/∨] or [▶▶I, FF/∧] to adjust the point.

Adjustments can be made between –128 and +127, approximately 8 seconds either side of the original point. (If the track is recorded in LP mode, approximately 16 seconds.)

4 Press [ENTER].

Play stops and "UTOC Writing" and "UTOC" flash on the display. When this stops flashing, the new track mark has been entered.

To cancel part way through

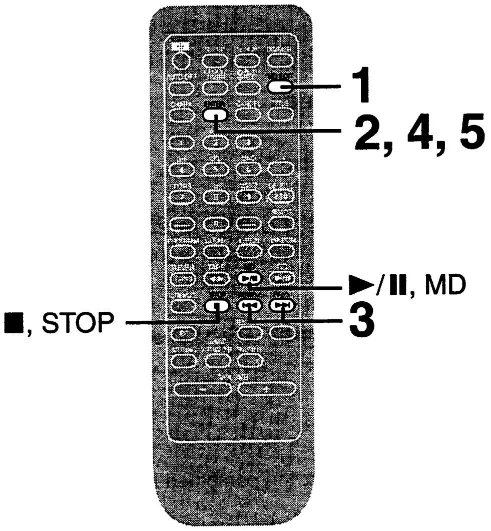
Press [■, STOP] or [CANCEL].

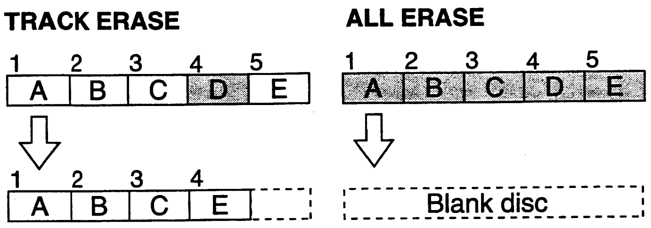
To remove the track mark again

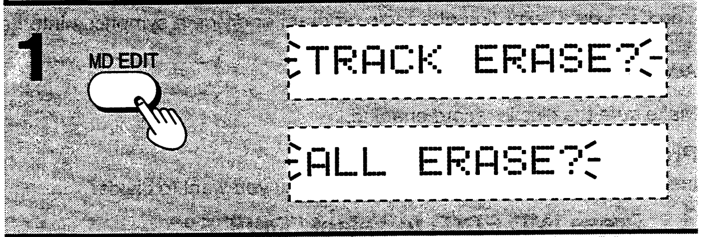
Use COMBINE (→ page 28).

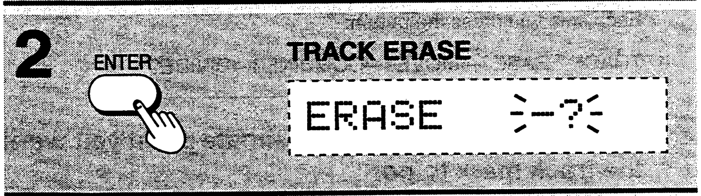
Note

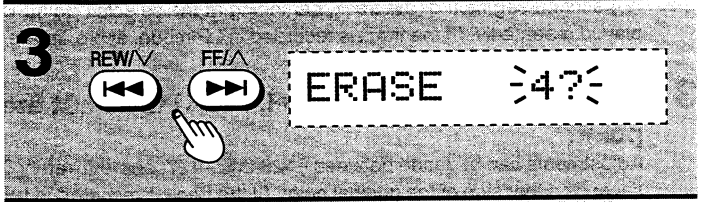
If you divide a titled track, the part after the new track mark becomes untitled.

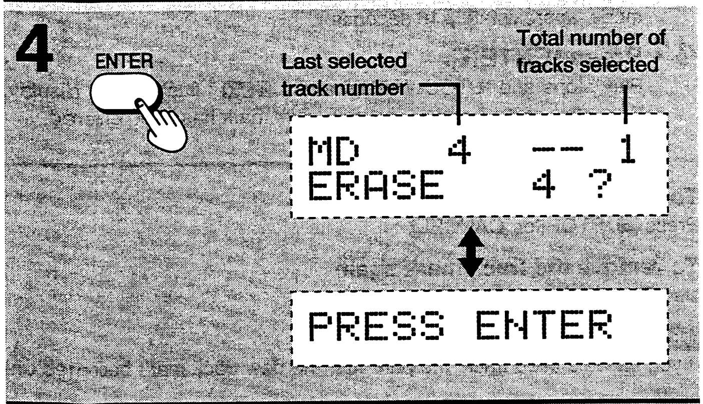

1
2, 4, 5
▶/II, MD
■, STOP
3

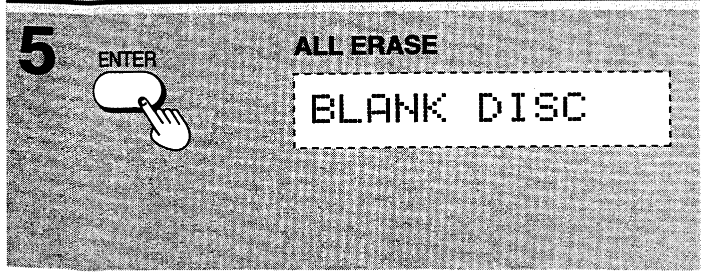

TRACK ERASE
1 2 3 4 5
A B C D E
1 2 3 4
A B C E
ALL ERASE
1 2 3 4 5
A B C D E
Blank disc


1
MD EDIT
TRACK ERASE?
ALL ERASE?


2
ENTER
TRACK ERASE
ERASE -?


3
REW/∨
FF/∧
ERASE 4?


4
ENTER
Last selected track number
Total number of tracks selected
MD 4 -- 1
ERASE 4 ?
PRESS ENTER


5
ENTER
ALL ERASE
BLANK DISC

MD editing

Erasing tracks and creating blank discs

Remote control only

There are two types of erasing;

TRACK ERASE: You can erase between 1 and 24 tracks at a time.
ALL ERASE: You can erase all the tracks.
Make sure the disc is record enabled.

Preparation:

Insert the MD (→ page 12) and press [▶/II, MD] to select "MD" as the source then press [■, STOP].

1 **While stopped**

Press [MD EDIT] to select "TRACK ERASE?" or "ALL ERASE?".

Each time you press the button:

TRACK ERASE? → ALL ERASE? → MOVE?
↑ ↓
TITLE ST.? ←——— COMBINE?

2 **Press [ENTER].**

With TRACK ERASE

3 **Press [|◀◀, REW/∨] or [▶▶|, FF/∧] to select the track.**

4 **Press [ENTER].**

Repeat steps 3 and 4 to select other tracks to erase.

5 **Press [ENTER].**

"UTOC Writing" and " UTOC " flash on the display.

TRACK ERASE:
When they stop flashing the track has been erased. The tracks after it move back to fill the space so there is no missing track number after a track is erased.

ALL ERASE:
When they stop flashing the disc has been erased and "BLANK DISC" is shown on the display.

To cancel part way through

Press [■, STOP] or [CANCEL].

You can use TRACK ERASE while playing or paused.

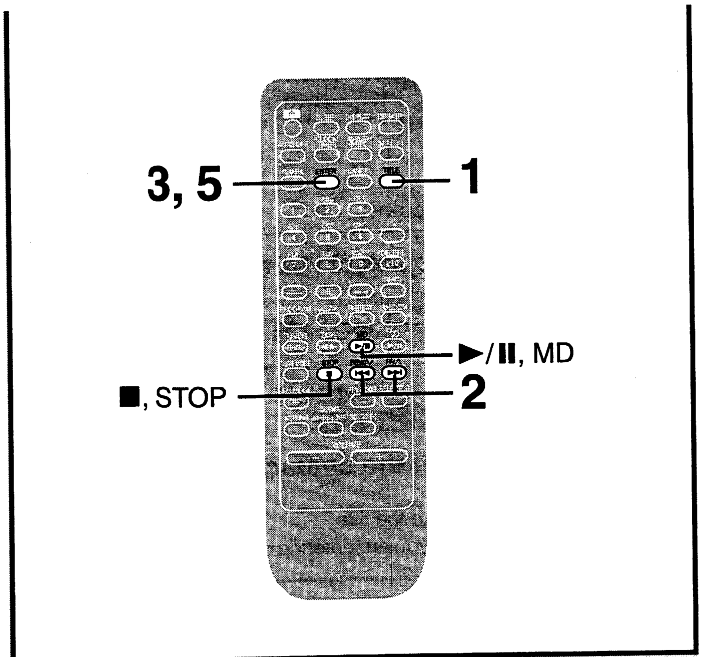
① Press [MD EDIT] to select "TRACK ERASE?" while the track you want to erase is playing or paused.
② Press [ENTER] twice.

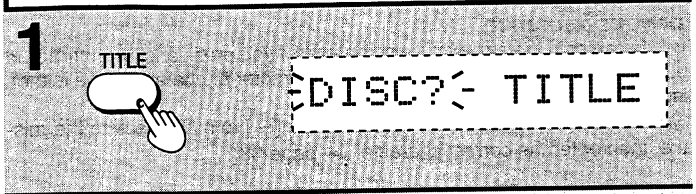
If "OVER" is displayed

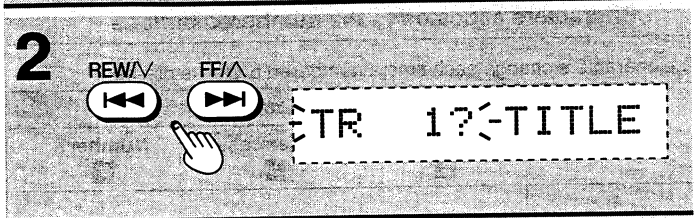
You have tried to select more than 24 tracks.
You cannot select anymore tracks to erase.

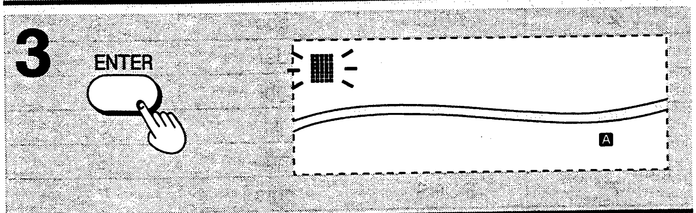
MD editing

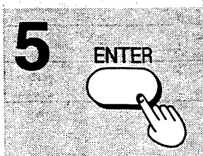
Titling discs and tracks











Remote control only

Titles of up to 100 characters long can be given to an MD and the tracks on it.

A maximum of about 1700 characters can be entered while recording or playing.

Preparation:

Press [▶/II, MD] to select MD as the source then press [■, STOP].

1 **While the disc is stopped**
Press [TITLE].

2 **Press [|◀◀, REW/∨] or [▶▶|, FF/∧] to select the item to be titled.**
Each time you press the button:

Disc ↔ Track 1 ↔ Track 2 ... ↔ Final track
↑_______________________________↑

3 **Press [ENTER].**

4 **Enter the required characters.** (→ page 32)

5 **Press [ENTER].**
Titling is complete after the message "UTOC Writing" and " UTOC " flash on the display.

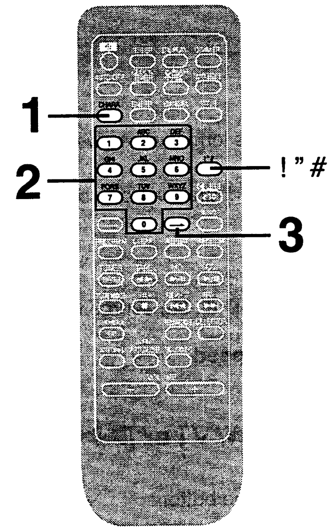
Repeat steps 2 – 5 until all required titles are entered.

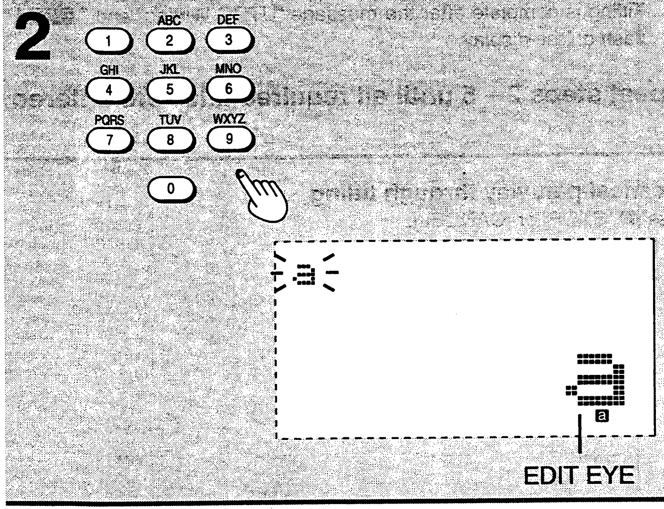
To cancel part way through titling

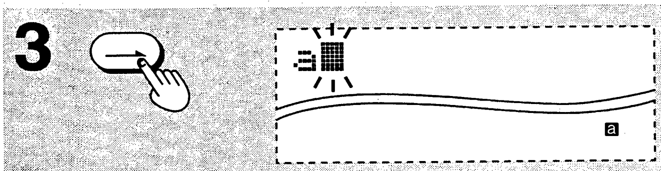
Press [■, STOP] or [CANCEL].

Any titles already entered remain.

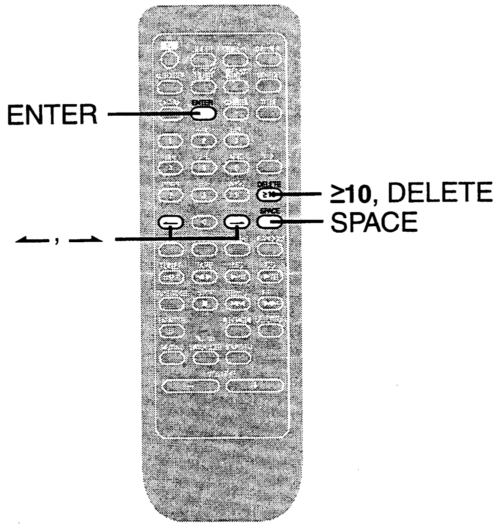
The previous display is restored.







A



MD editing

Titling discs and tracks

Remote control only

Entering the characters

1 Press [CHARA] to select the type of character.

Each time you press the button:

A (Capitals) → a (Lower case) → 1 (Numbers)

2 Press the numbered buttons so the character is displayed in the EDIT EYE.

3 Press [→] to enter the character.

Repeat steps 1 – 3 to complete the title.
Step 1 is not necessary when you are entering characters of the same type.

To enter a space

Press [→] when no character is in the EDIT EYE.

For your reference

The character in the edit eye is also entered if you press another numbered button or character type button. Another character or character type is then displayed.
If you entered a character by mistake, press [←] to move back to the mistake, then enter the correct character (→ page 33).

Characters allocated to the numbered buttons

The characters change each time a numbered button is pressed.

	Character type		
	Capitals A	Lower case a	Numbers 1
1			1
2	ABC	abc	2
3	DEF	def	3
4	GHI	ghi	4
5	JKL	jkl	5
6	MNO	mno	6
7	PQRS	pqrs	7
8	TUV	tuv	8
9	WXYZ	wxyz	9
0			0

To enter symbols

Press [!"#].
Each time the button is pressed, the symbols are displayed in the EDIT EYE in the following order.

! " # $ % & ' ( ) * + , – . / : ; < = > ? @ _ `

A Editing titles

To move the cursor

Press [←] or [→].

Inserting a character or space

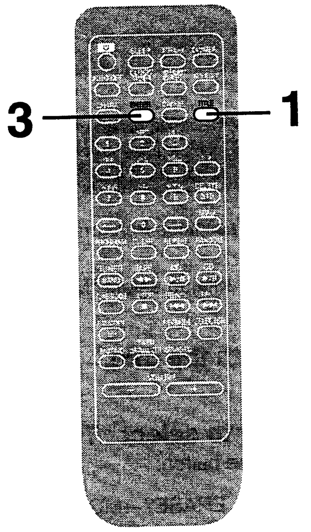
① Move the cursor over the character to the right of the place where the new character or space is to go.
② Enter the desired character or press [SPACE] to insert a space.

Deleting a character

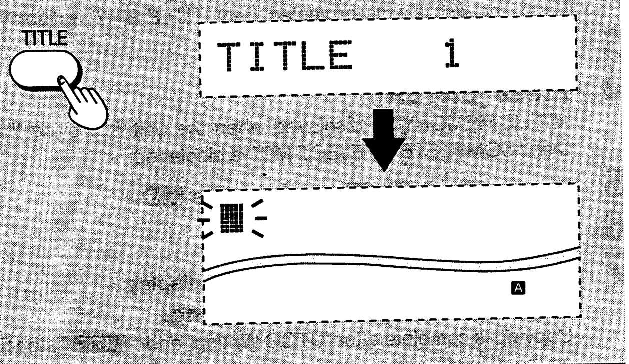
① Move the cursor over the character to be deleted.
② Press [≥10, DELETE].

Making corrections to a title

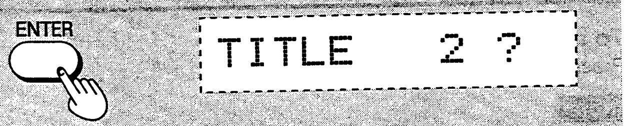
① Select the title to be corrected (→ page 31, steps 1 - 3).
② Correct the title using the above editing techniques.
③ Press [ENTER].



1



3



Remote control only

Entering track titles during CD recording

You can enter the titles for all the tracks regardless of the track currently recording.

1 **While recording**
Press [TITLE].
The titling display for the track recording is shown.

2 **Enter the title.** (→ page 32, steps 1 - 3)

3 **Press [ENTER].**
"TITLE WRITE" is displayed.
Then a message appears asking you if you want to title the next track.
If you do, repeat steps 1 to 3.
If you do not want to enter any more titles, press [■, STOP] or [CANCEL]. Recording will continue.
You can also move to the next track without entering a title by pressing [|◀◀, REW/∨] or [▶▶|, FF/∧].

Titling is complete after the recording is finished and "UTOC Writing" and " UTOC " stop flashing on the display.

To cancel part way through

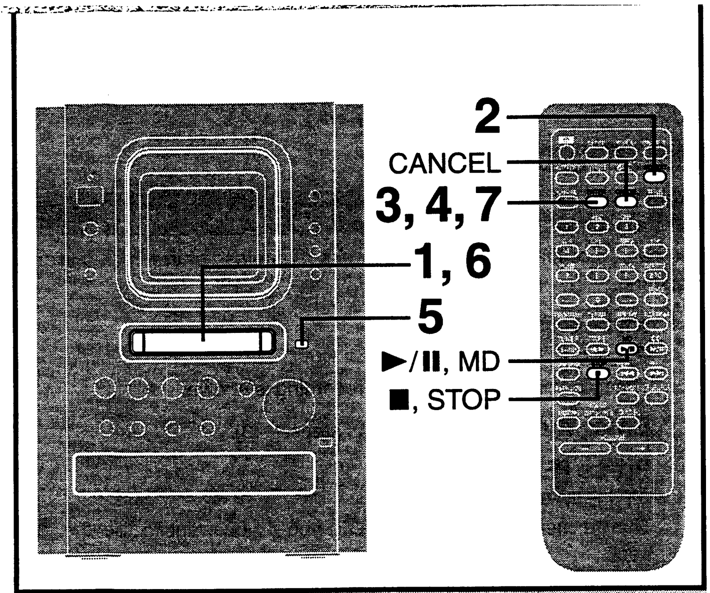
Press [■, STOP] or [CANCEL].
Any titles you have confirmed by pressing [ENTER] remain intact.

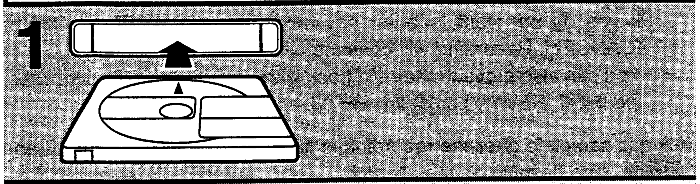
To title a track while it is playing

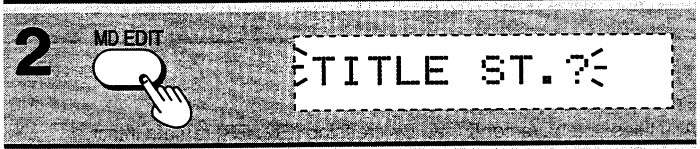
① Press [TITLE].
② Enter the title (→ page 32, steps 1 - 3).
③ Press [ENTER].
"TITLE WRITE" is displayed, then the previous display is restored.

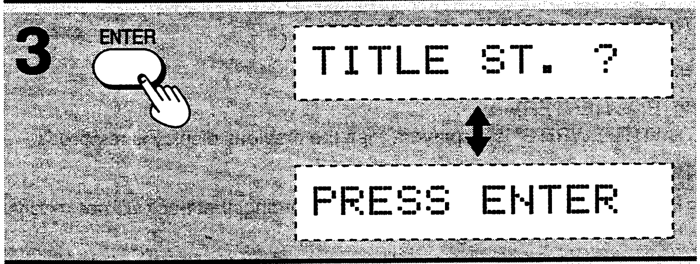
Note

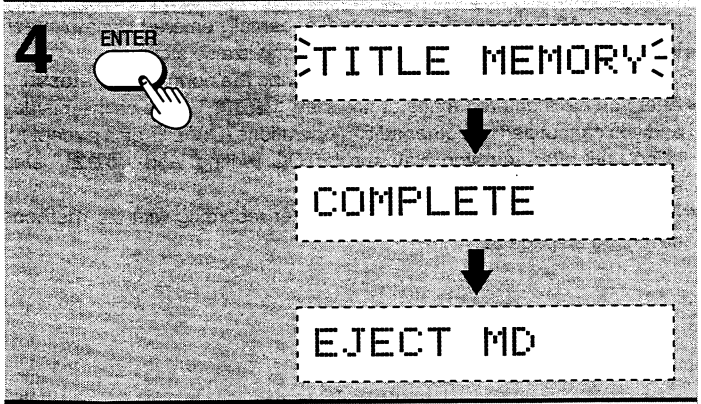
- Even if the next track starts playing or recording, that track will not receive the title you are entering.
- If play or recording finishes while you are entering a title, the titling display is cleared. Any titles you have entered, or partially entered, remain intact.
- When one track edit recording finishes, titling is also stopped. Complete the title after recording by following the normal titling steps.
- After you have entered a title during play, " UTOC " lights on the display and you cannot perform other editing operations (DIVIDE, etc.) except for titling until after you stop play and "UTOC Writing" and " UTOC " stop flashing.
- Add other titles and make corrections after recording with the methods described on page 32.

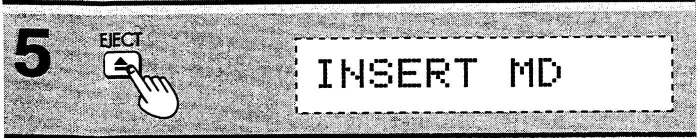

2
CANCEL
3, 4, 7
1, 6
5
►/II, MD
■, STOP

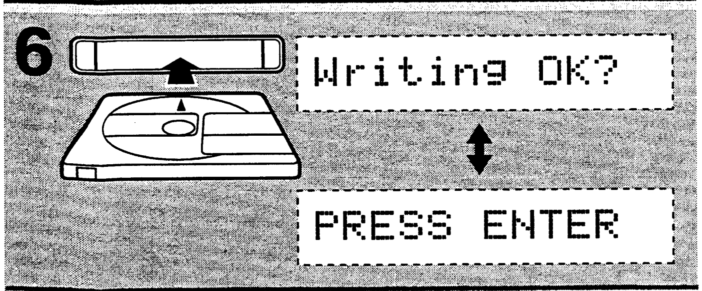


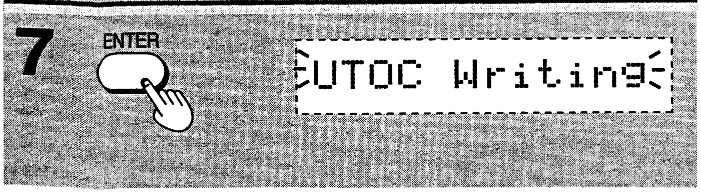

2
MD EDIT
TITLE ST.?


3
ENTER
TITLE ST. ?
PRESS ENTER


4
ENTER
TITLE MEMORY
COMPLETE
EJECT MD


5
EJECT
INSERT MD


6
Writing OK?
PRESS ENTER


7
ENTER
UTOC Writing

MD editing

Titling discs and tracks

Copying the titles from one MD to another (Title station)

You can copy the disc and track titles from one MD to another MD with the same number of tracks.

Preparation: Press [►/II, MD] to select "MD" as the source and press [■, STOP].

1. **Insert the MD with the title.**
2. **While stopped**

   Press [MD EDIT] to select "TITLE ST.?".

   Each time you press the button:

   TRACK ERASE?→ALL ERASE?→MOVE?
   ↑ ↓
   TITLE ST.?←COMBINE?

   When the disc is write-protected, only "TITLE ST.?" is displayed.
3. **Press [ENTER].**
4. **Press [ENTER].**

   "TITLE MEMORY" is displayed when the unit is copying the titles, then "COMPLETE"→"EJECT MD" is displayed.
5. **Press [≜, EJECT] to eject the MD.**
6. **Insert the other MD.**
7. **When "Writing OK?" appears on the display**

   Press [ENTER] to start copying.

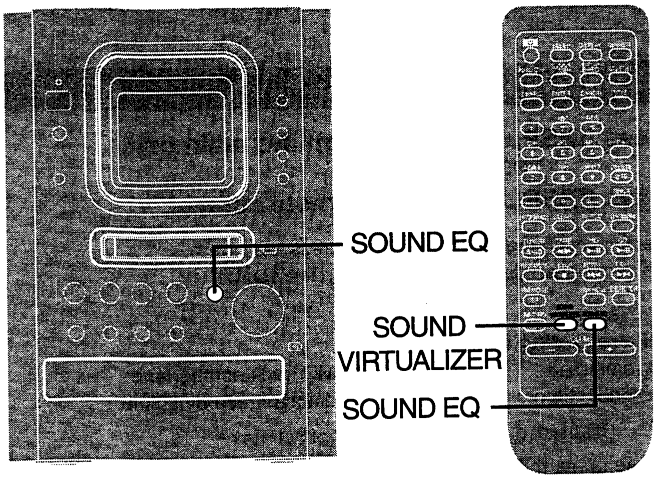
   Copying is complete after "UTOC Writing" and " UTOC " stop flashing on the display.

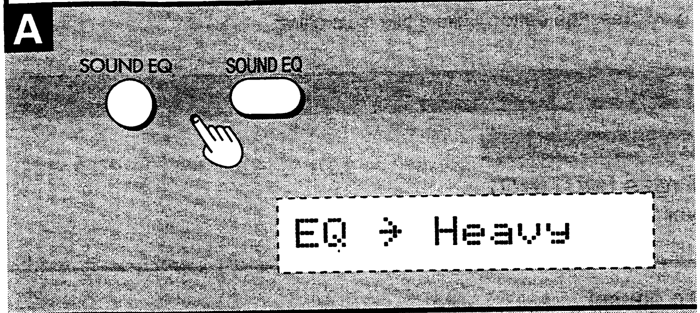
To cancel part way through

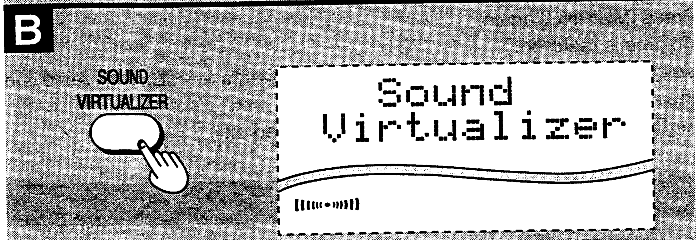
Press [■, STOP] or [CANCEL].

Note

- You cannot copy titles from playback MDs.
- You can only copy titles if both MDs have the same number of tracks.
- The unit can only copy the titles from one MD.
- The title will be lost from the unit's memory if the unit is turned off.
- Any titles already on the other MD will be replaced by this operation.


SOUND EQ
SOUND VIRTUALIZER
SOUND EQ


A
SOUND EQ
SOUND EQ
EQ → Heavy


B
SOUND VIRTUALIZER
Sound Virtualizer

Changing the sound quality

A Using the built-in sound equalizer

You can choose one of four types of sound quality.

ⓐ	**Heavy**	: Adds punch to rock
ⓑ	**Clear**	: Clarifies higher sounds
ⓒ	**Soft**	: Use this setting for background music
ⓓ	**Vocal**	: Adds gloss to vocals

Press [SOUND EQ] to select a setting.

Each time the button is pressed:

→ⓐ Heavy → ⓑ Clear → ⓒ Soft → ⓓ Vocal
OFF (cancelled)

Note

Recordings are unaffected by changes to sound quality.

B Using the SOUND VIRTUALIZER

Remote control only

This effect stabilizes the midrange sounds, such as vocals, and gives sound natural width and depth.
Use it when listening to stereo sources.

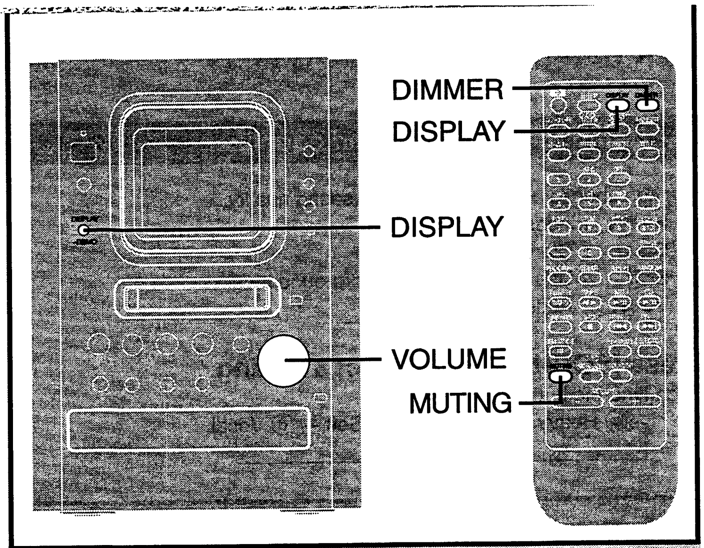
Press [SOUND VIRTUALIZER].

To cancel
Press [SOUND VIRTUALIZER].

Note

- This effect is less discernible when using headphones.
- Cancel this effect if noise increases when listening to FM.

Convenient functions


DIMMER
DISPLAY
DISPLAY
VOLUME
MUTING

A Switching the display

Press [DISPLAY, –DEMO] on the main unit.

OR

Press [DISPLAY] on the remote control.

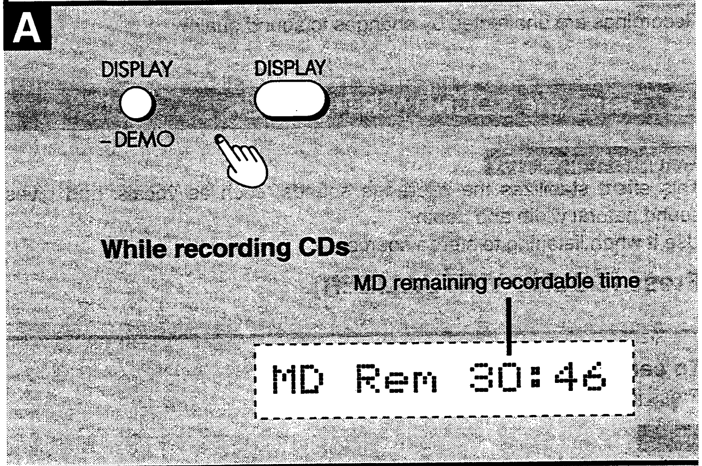
The display changes each time you press the button.
The information displayed depends on the source.

For example:

While recording CD to MD

MD remaining recordable time ⟶ MD track number and elapsed recording time
↑ CD track number and elapsed play time ↵

- If you press this button while a title with 13 or more characters is being displayed, the title will scroll from right to left. The next display is shown if you press the button while a title is scrolling.


A
DISPLAY
–DEMO
DISPLAY
While recording CDs
MD remaining recordable time
MD Rem 30:46

B Muting the volume

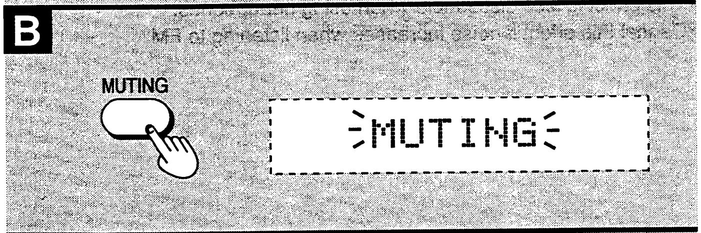
Remote control only

Press [MUTING].

Volume is reduced to minimum.

To cancel

Press [MUTING] again.
Volume is restored.
To cancel from the unit, turn [VOLUME] to minimum (– – dB), then raise it to the required level.
Muting is also cancelled when the unit is turned off.


B
MUTING
MUTING

C To dim the display panel

Remote control only

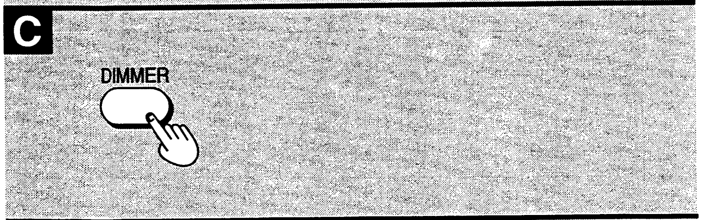
Use this when you are going to sleep or any other time you would prefer the panel to be dimmer.

Press [DIMMER].

The display panel and other panel indicators dim, except for the [AC IN] indicator.

To cancel

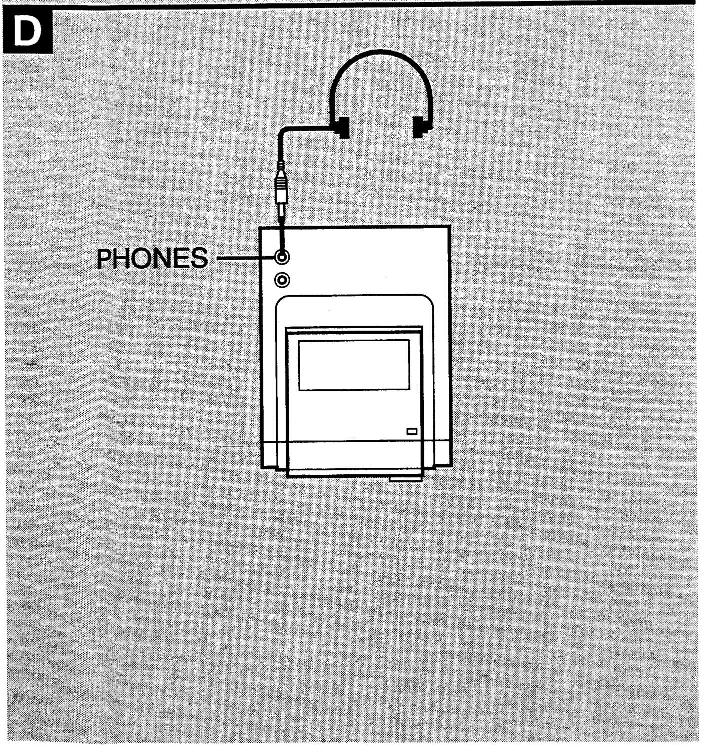
Press [DIMMER] again.

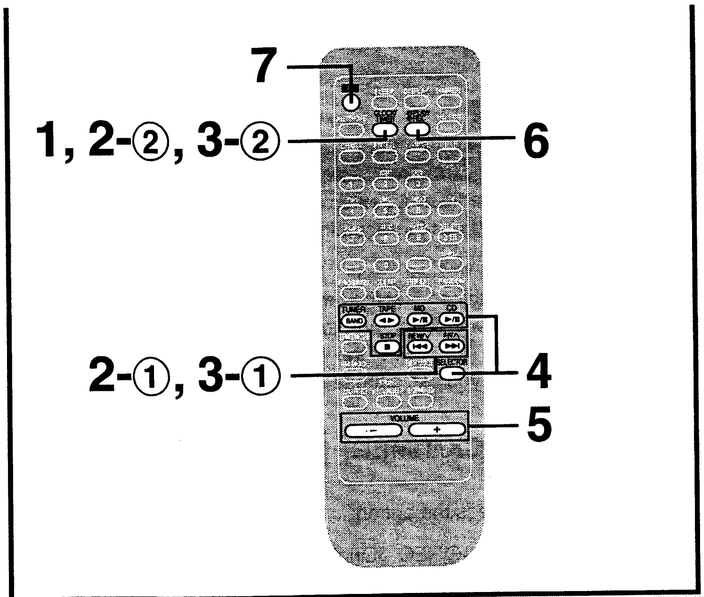


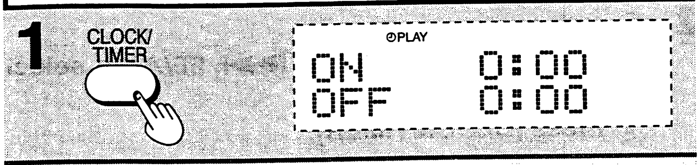
D Using headphones (not included)

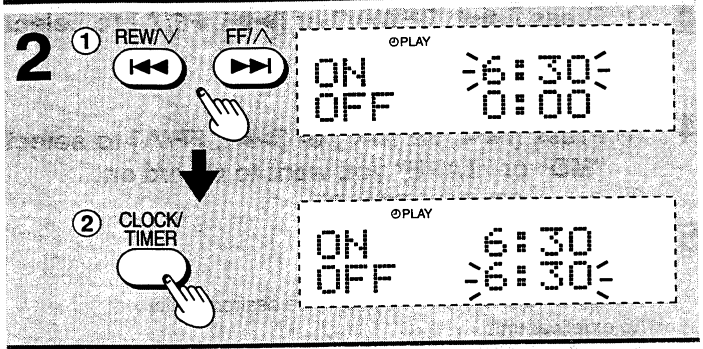
Reduce the volume before connection.

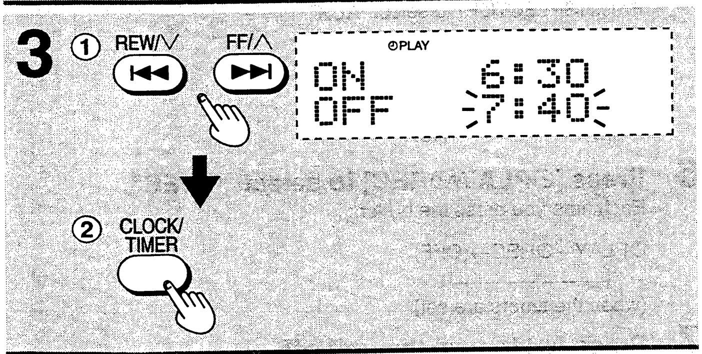
Avoid listening for prolonged periods of time to prevent hearing damage.
Plug type: 3.5 mm stereo

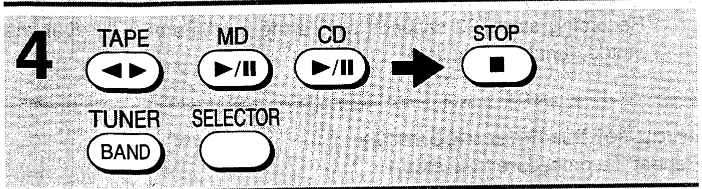


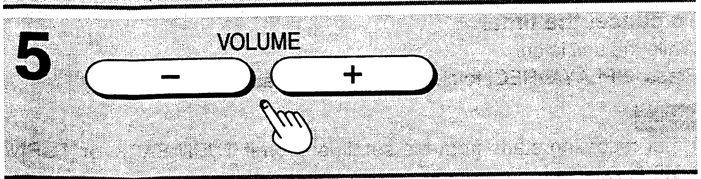

7
1, 2-②, 3-②
6
2-①, 3-①
4
5

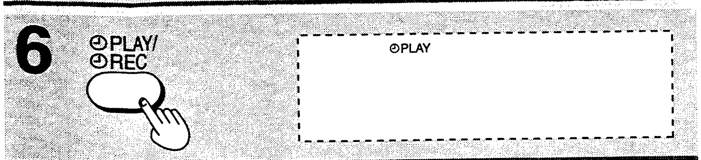

1
CLOCK/TIMER
◷PLAY
ON 0:00
OFF 0:00

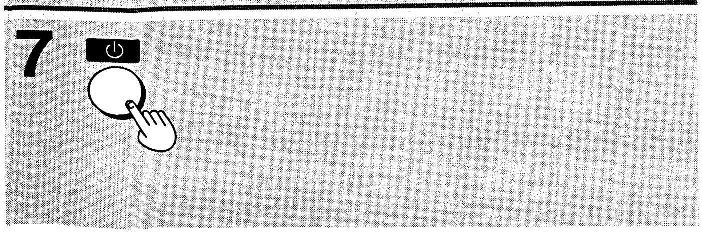

2
① REW/∨ FF/∧
◷PLAY
ON 6:30
OFF 0:00
② CLOCK/TIMER
◷PLAY
ON 6:30
OFF 6:30


3
① REW/∨ FF/∧
◷PLAY
ON 6:30
OFF 7:40
② CLOCK/TIMER


4
TAPE
MD
CD
STOP
TUNER
BAND
SELECTOR




6
◷PLAY/
◷REC
◷PLAY



Using the timers

Remote control only

The play timer

This timer starts play of the selected source at the selected time.
The example shows settings for play between 6:30 and 7:40.

Preparation:

- Press [⏻] to turn the unit on, set the time (→ page 10).

1 Press [CLOCK/TIMER] twice to select "◷PLAY".

Each time you press the button:

CLOCK→◷PLAY→◷REC→Original display

2 ① (within 5 seconds or so)
Press [|◀◀, REW/∨] or [▶▶|, FF/∧] to select ON time.
② Press [CLOCK/TIMER].

3 ① Press [|◀◀, REW/∨] or [▶▶|, FF/∧] to select OFF time.
② Press [CLOCK/TIMER].

4 Select the source.

MD, CD, tape
Press [▶/II, MD], [▶/II, CD] or [◀ ▶, TAPE] to select "MD", "CD" or "TAPE" and press [■, STOP], and insert disc or cassette.

The radio
Press [TUNER, BAND] and tune in the desired station.

An external unit
Press [SELECTOR] to select "AUX".
Each time you press the button:

CD→MD→TAPE→TUNER
↑ ↓
P-MD ← AUX

5 Set the volume for timer play.

6 Press [◷PLAY/◷REC] to select "◷PLAY".

Each time you press the button:

◷PLAY→◷REC→(OFF)

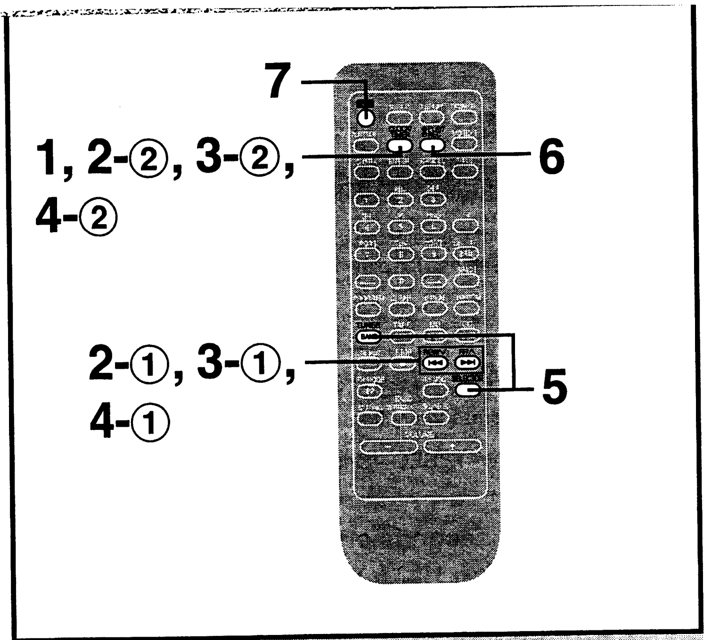
(when the timers are set)

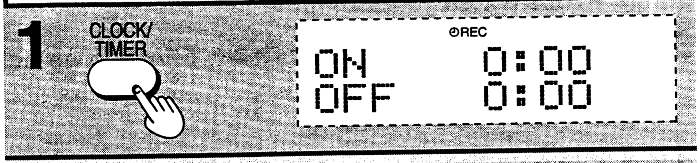
7 Press [⏻] to turn the unit off.

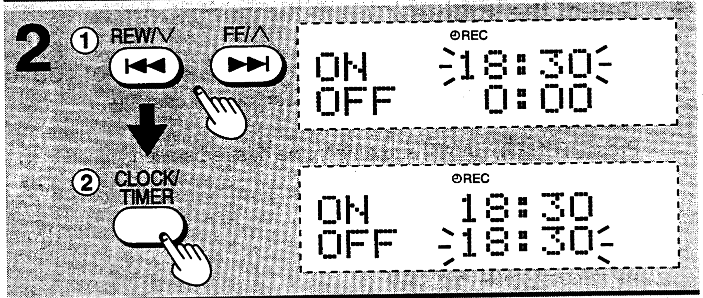
The timer starts in the set condition at the set time.
The volume increases gradually to the set level.

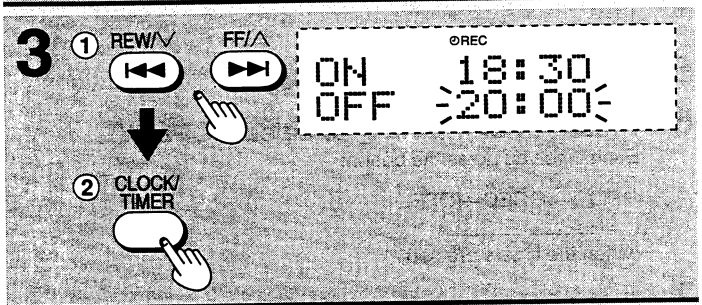
If you set the timer incorrectly
Repeat the procedure from step 1.

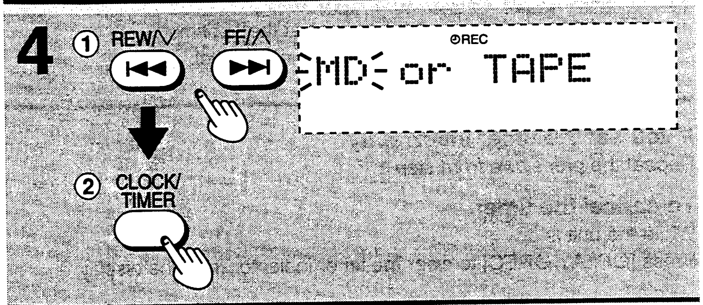
To cancel the timer
While the unit is on
Press [◷PLAY/◷REC] to clear the timer indicator from the display.

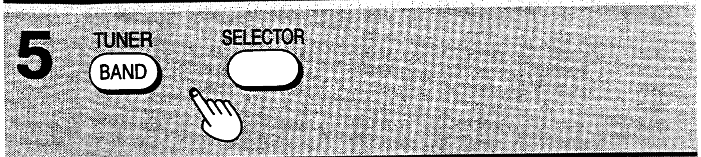

7
1, 2-②, 3-②, 4-②
6
2-①, 3-①, 4-①
5

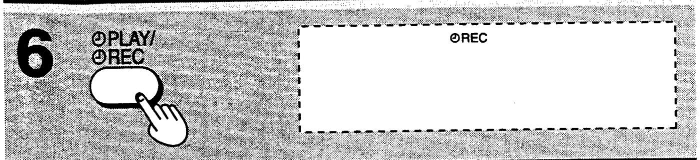

1
CLOCK/ TIMER
⊙REC
ON 0:00
OFF 0:00

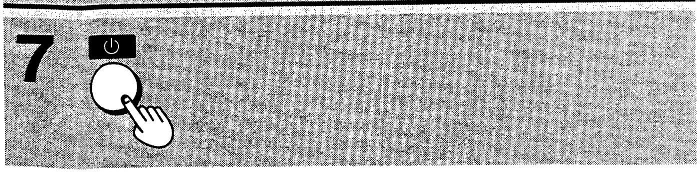

2
① REW/V FF/Λ
⊙REC
ON 18:30
OFF 0:00
② CLOCK/ TIMER
⊙REC
ON 18:30
OFF 18:30


3
① REW/V FF/Λ
⊙REC
ON 18:30
OFF 20:00
② CLOCK/ TIMER


4
① REW/V FF/Λ
⊙REC
MD or TAPE
② CLOCK/ TIMER


5
TUNER BAND
SELECTOR


6
⊙PLAY/ ⊙REC
⊙REC



Using the timers

Remote control only

The record timer

This timer records the radio or an external source at the set time.
The example shows settings for recording from 18:30 to 20:00.

Preparation:

- Press [⏻] to turn the unit on, set the time (→ page 10).
- Insert an MD or tape and do the preparatory steps (→ page 20 or 21).
- When recording to an MD, select the required recording mode (→ page 20 or 40). The modes you can choose depend on the source you want to record.

1 Press [CLOCK/TIMER] three times to select "⊙REC".

Each time you press the button:

CLOCK→⊙PLAY→⊙REC→Original display

2 ① (within 5 seconds or so)
Press [I◀◀, REW/V] or [▶▶I, FF/Λ] to select ON time.
② Press [CLOCK/TIMER].

3 ① Press [I◀◀, REW/V] or [▶▶I, FF/Λ] to select OFF time.
② Press [CLOCK/TIMER].

4 ① Press [I◀◀, REW/V] or [▶▶I, FF/Λ] to select "MD" or "TAPE" you want to record on.
② Press [CLOCK/TIMER].

5 Select the source.

The radio
Press [TUNER, BAND] and tune in the desired station.
An external unit
Press [SELECTOR] to select "AUX".
Each time you press the button:

CD→MD→TAPE→TUNER
↑ ↓
P-MD ← AUX

6 Press [⊙PLAY/⊙REC] to select "⊙REC".

Each time you press the button:

⊙PLAY→⊙REC→(OFF)

(when the timers are set)

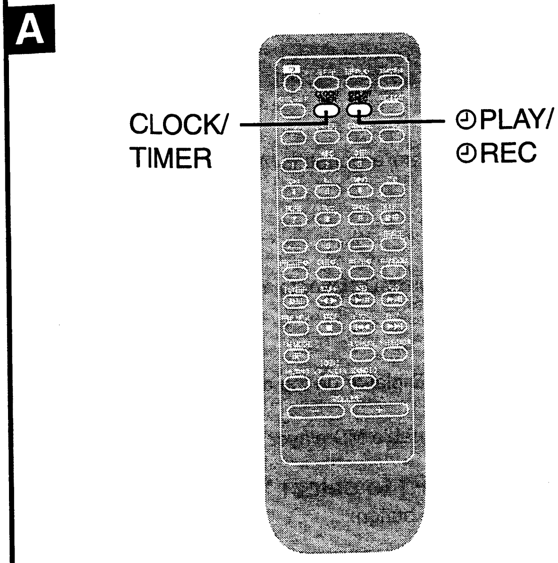
7 Press [⏻] to turn the unit off.

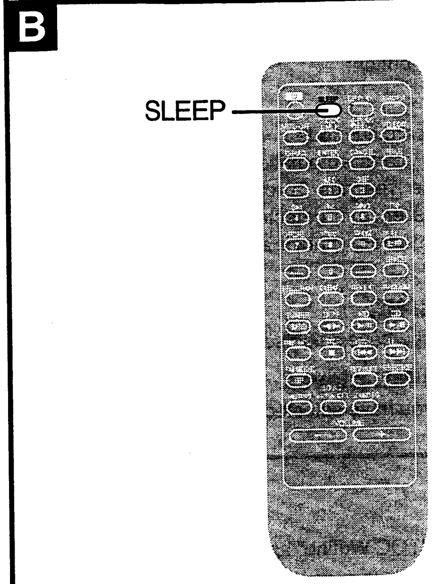
Recording starts 30 seconds before the set time with the volume muted during the set time.

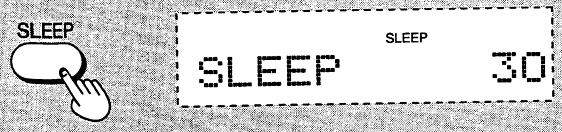
If you set the timer incorrectly
Repeat the procedure from step 1.

To cancel the timer
While the unit is on
Press [⊙PLAY/⊙REC] to clear the timer indicator from the display.

Note
Timer recording starts from the set time even if TURN BACK or TURN/TIME is selected.







Using the timers

Remote control only

A The play and record timers

Checking the timers

While the unit is off

Press [CLOCK/TIMER].

The timer conditions are shown in the following order (when set).

- Play timer:
  start and finish times→source→volume
- Record timer:
  start and finish times→source and recording destination→recording mode (for recording to MD only)

While the unit is on

Press [CLOCK/TIMER] to select "⊙PLAY" or "⊙REC".

Start and finish times are shown.

Turning the timers on and off

The selected timer comes on at the set times if the "⊙PLAY" indicator or "⊙REC" indicator on the display is on. The indicator can be turned on and off by pressing [⊙PLAY/⊙REC] while the unit is on.

Playing the unit after the timers are set

The unit can be used after the timers are set.

Turn the unit off before the set start time.

Note

- High speed CD recording does not work with the record timer. The CD is recorded at normal speed.
- If you select an external source, set the external unit's timer to the same time. (See the instruction manual that came with the external unit.)

B The sleep timer

This function turns the unit off after a set time.

While playing a source

Press [SLEEP] to select the time (minutes).

Each time you press the button:

→SLEEP 30→SLEEP 60→SLEEP 90
SLEEP OFF←SLEEP 120←

To cancel the sleep timer

Press [SLEEP] to select "SLEEP OFF".

To confirm the remaining time

Press [SLEEP].

The remaining time is shown for about 5 seconds.

To change the setting

Press [SLEEP] to display the remaining time, then press again to select the required time.

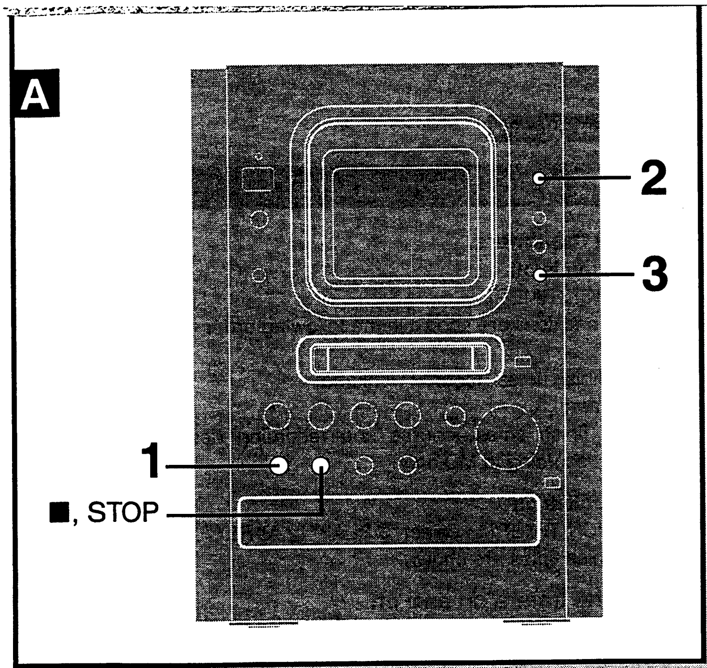
Using the timers together

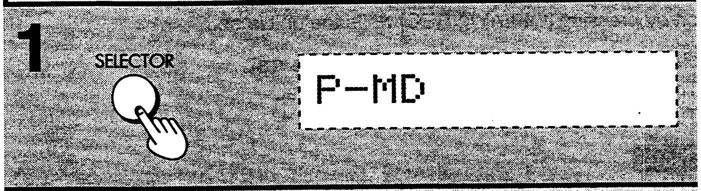
The play and sleep timer or the record and sleep timer can be used together.

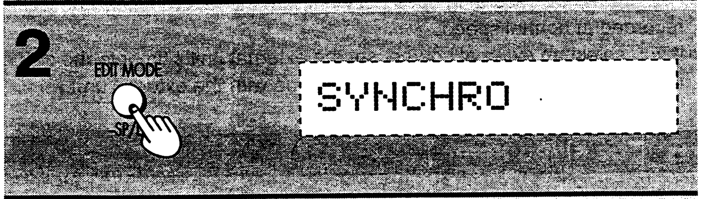
The sleep timer always has priority. Be sure not to overlap timer settings.

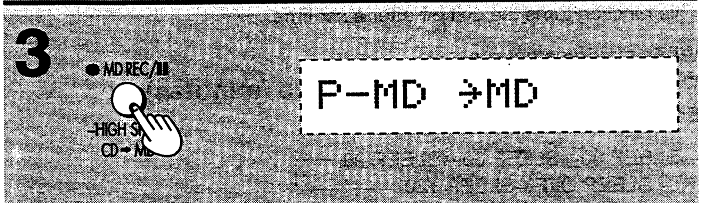
The play and record timer cannot be used in combination.

A









Using other equipment

A Recording from a portable MD player

MD REC

Make an analog recording from a portable MD player connected to the P-MD terminal.

Preparation:
- Insert the MD.
- Set the volume on the portable MD player to an appropriate level and turn all sound quality modes off.

Note
- Do not place the portable MD player on top of this unit during recording. This can cause noise.
- Adjust the volume on the portable MD player if there is distortion.

1 Press [SELECTOR] to select "P-MD".

Each time you press the button:

CD→MD→TAPE→TUNER
↑ ↓
P-MD ←—— AUX

2 Press [EDIT MODE] to select the desired mode.

Each time you press the button:
MANUAL↔SYNCHRO

MANUAL: Normal recording mode
SYNCHRO: Recording starts automatically when the signal from the source reaches a certain level, pauses if a 3-second silence is detected, then starts again when play starts. A track mark is added at the point recording starts.

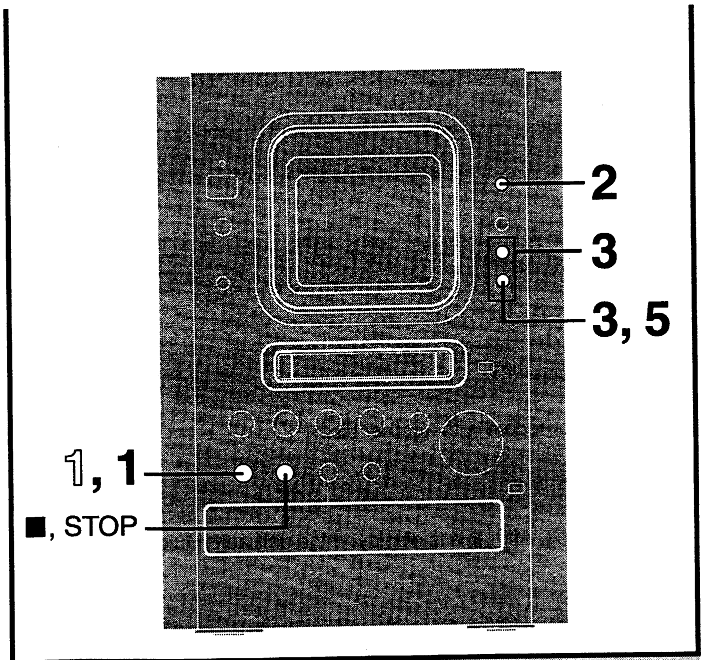
3 Press [● MD REC/ II].

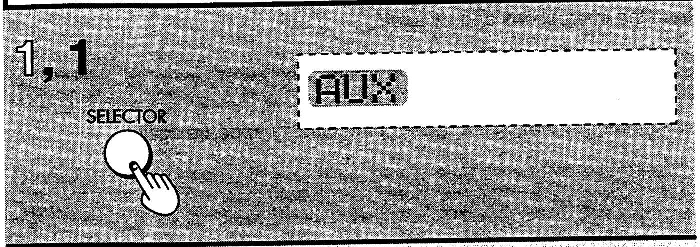
Recording starts when you have selected MANUAL.

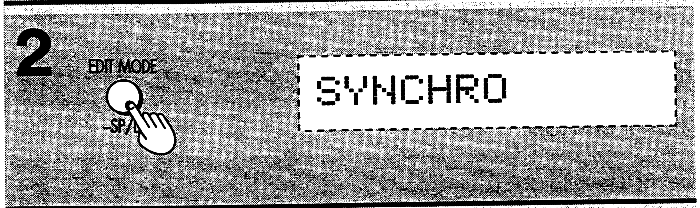
4 Start the portable MD player.

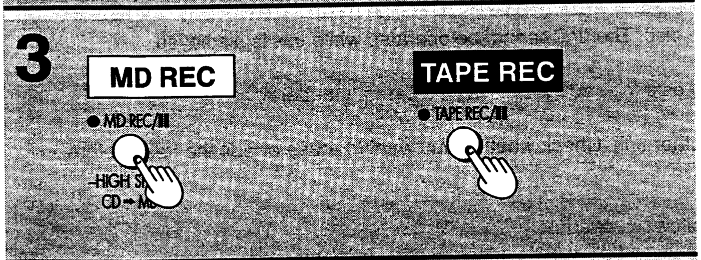
Recording starts when you have selected SYNCHRO.

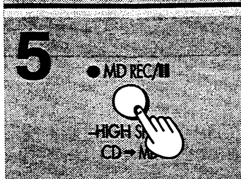
To stop recording
Press [■, STOP].
Recording is complete after "UTOC Writing" and " UTOC " stop flashing on the display.











Listening to an external source

1. **Press [SELECTOR] to select "AUX".**

   Each time you press the button:

   CD→MD→TAPE→TUNER
   ↑ ↓
   P-MD ←——— AUX

2. **Operate the unit.**

   See the unit's operating instructions for details on operation and connection.

Recording an external source

MD REC **TAPE REC**

1 Press [SELECTOR] to select "AUX".

MD REC **only**

2 Press [EDIT MODE] to select the desired mode.

(→ page 20)

Each time you press the button:

MANUAL→SYNCHRO→TURN BACK
↑ ↓
TURN/TIME ←——— TIME MARK

3 Press the REC button.

MD REC : Press [● MD REC/II].
TAPE REC : Press [● TAPE REC/II].

Note

Wait until the "TURN BACK" indicator stops flashing if you selected "TURN BACK" or "TURN/TIME" in step 2. (Turn back may not function correctly if recording is started while the indicator is flashing.)

4 Start the source to be recorded.

MD REC **only**

5 Press [● MD REC/II] if you selected "TURN BACK" or "TURN/TIME" in step 2.

To stop recording

Press [■,STOP].

MD REC

Recording is complete after "UTOC Writing" and " UTOC " stops flashing on the display.

Note

- Do not use SYNCHRO if the material you are recording contains low level of sound. Recording may not start correctly or it may stop partway through. Use another recording mode in these cases.

Displays

BLANK DISC	An MD with no recording on it is inserted.
CAN'T COMBINE	System limitations prevent combining some tracks.
CAN'T DIVIDE	System limitations prevent dividing some tracks.
CAN'T EDIT	This unit cannot edit titles more than 100 characters long.
DISC ERROR	There is a problem with the disc and you need to replace it.
DISC FULL	There is no space on the disc. Erase some tracks or record with another disc.
DISC PROTECTED	Close the write protect hole to enable recording and editing.
EJECT/ERROR **LOAD/ERROR**	A problem occurred while loading or ejecting the disc. After this is displayed the unit automatically switches off. Remove the MD and start again.
EMERGENCY/STOP	A problem occurred during recording. Eject the MD, reinsert it and start recording from the beginning again.
ERROR	Incorrect operation was performed. Read the instructions and try again.
F76	The speaker cords may have shorted. Turn the unit off and reconnect the cords. If this does not fix the problem, consult your dealer.
MD F26	Turn the unit off then on again and reinsert the MD. Consult a dealer if the display appears again.
MD NO DISC **CD NO DISC**	A disc hasn't been inserted.
NO TAPE	A cassette hasn't been inserted.
PLAYBACK DISC	This is a playback only disc. You cannot record on it or edit it.
SCMS NO COPY	You cannot record from DVDs, video CDs or CD-ROM.
TITLE FULL	You have entered the maximum number of letters for the track title.
TOC Reading	The unit is reading information on the disc. The unit cannot be operated while this is displayed.
TRACK NUMBER/NOT EQUAL	You cannot use title station to copy titles if the second MD has a different number of tracks.
TRACK/PROTECTED	The track was write-protected on another unit. Check whether you want to erase or edit the track before proceeding.
UTOC FULL	This display appears for one of the following reasons. ●The section reserved for text information is full; erase unneeded titles to make room. ●The maximum number of tracks (254) has been reached; erase unneeded tracks.

Maintenance

If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.
If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and-water solution or a weak detergent solution.

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

For a cleaner crisper sound

Clean the heads regularly to assure good quality playback and recording. Use a cleaning tape (not included).

Troubleshooting guide

Before requesting service, make the below checks. If you can't fix the system as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer.

Reference pages are shown as black circled numbers ❺.

Note

The unit may become warm during operation, but this is normal.

Common Problems

No sound.	Turn the volume up. The speaker cords may be shorted. Turn the unit off, check and correct the connections and turn the unit on. ❺
Sounds unfixed, reversed or come from one speaker only.	Check the speaker connections. ❺
Humming heard during play.	An AC mains lead or fluorescent light is near the cables. Keep other appliances and leads away from this unit's cables. If possible in your area, turn the AC mains lead's plug or connector over to reverse the lead's polarity.

MDs

Cannot start play.	There may be condensation inside the unit. Wait for an hour and try again.
Cannot record.	Close the write protect hole. ⓫ Check all connections. ❺, ❻ Replace with a recording MD. ⓫
Cannot enter text.	Reduce the amount of text on the MD. (An MD can hold up to about 1700 characters.) ㉛
The disc isn't pulled automatically into the unit, or it needs to be pushed forcefully to go in.	Turn the unit off then on again. This situation can occur if the MD is stopped when ejecting or if it is forced into the slot.
Cannot high-speed record.	There are limitations on high-speed recording. ㉕
No operation or incorrect display.	The MD may not act correctly because of the recording system. This may cause the following problems: • UTOC FULL is displayed despite there being space on the MD and the maximum number of tracks is yet to be reached. • COMBINE or DIVIDE cannot be used. • Remaining time doesn't increase after erasing a track. • The total time of the tracks and the remaining recording time do not add up to the total possible recording time. This may occur because tracks less than two seconds are counted as two seconds.
After inserting an MD, "TOC Reading" continues to flash and you are unable to operate the unit or eject the MD.	A problem occurred while the unit was reading TOC. 1 Press [⏻/I] and wait a moment until the unit clicks to indicate it is completely off. 2 Press [⏏, EJECT]. The unit comes on and the MD is ejected. (Repeat steps 1 and 2 if the MD is not ejected.) 3 Insert another MD. If the problem reoccurs, consult your dealer.
Elapsed play time is displayed but no sound is output.	MDs recorded with a long play MDLP* mode (LP2 or LP4) cannot be played on this unit. *MDLP is a new MD format.

CDs

The display is wrong or play won't start.	The disc may be upside down. ⓭ Wipe the disc. Replace the disc if it is scratched, warped, or nonstandard. ⓭ There may be condensation inside the unit. Wait for an hour and try again.
Only one track from the CD is recorded.	Press [EDIT MODE] to cancel one track edit recording and to select the required mode (AUTO REC or OFF). ㉓

The radio

Noise is heard. **The stereo indicator flickers or doesn't light.** **Sound is distorted.**	Use an outdoor antenna. ❻
A beat sound is heard.	Turn the TV off or separate it from the unit.
A low hum is heard during AM broadcast.	Separate the antenna from other cables and leads.

Cassette tapes

Poor quality sound.	Clean the heads. ㊷
Recording is not possible.	If the erasure prevention tabs have been removed, cover the holes with adhesive tape. ㉑

Remote control

Remote control doesn't work.	Check the batteries are inserted correctly. ❼ Replace the batteries if they are worn. ❼

Specifications

■ Amplifier section

RMS power output	
THD 10 %, both channels driven	
LOW	2×15 W (6 Ω)
HIGH	2×3 W (6 Ω)
Total BI-AMP power	2×18 W
PMPO (Except for United Kingdom)	320 W
Input sensitivity	
AUX	480 mV
P-MD	160 mV
Input impedance	
AUX	25 kΩ
P-MD	5 kΩ
Output impedance	
Headphone	16–32 Ω

■ FM tuner section

Frequency range	87.50–108.00 MHz (0.05 MHz steps)
Sensitivity	1.8 μV (IHF)
S/N 26 dB	1.5 μV
Antenna terminal(s)	75 Ω unbalanced

■ AM tuner section

Frequency range	
For United Kingdom	522–1629 kHz (9 kHz steps)
For others	522–1629 kHz (9 kHz steps) 520–1630 kHz (10 kHz steps)
Sensitivity	
S/N 20 dB	500 μV/m

■ Cassette deck section

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s
Overall frequency response (-6 dB at DECK OUT)	
Type I (Normal)	35 Hz–14 kHz
Type II (High)	35 Hz–14 kHz
S/N ratio	
Type I (Normal)	50 dB (A weighted)
Wow and flutter	0.18% (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

■ MD section

System	MiniDisc Digital Audio System
Recording	Magnetic field modulation direct overwrite
Reading	Non-contact optical system with semiconductor laser (λ=780 nm)
Sampling frequency	44.1 kHz
Coding system	ATRAC
Number of channels	2 channels stereo
Wow and flutter	Below measurable limit

■ CD section

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source	Semiconductor laser
Wavelength	780 nm
Number of channels	2 channels stereo
S/N ratio	
SP OUT	70 dB (JIS A)
Wow and flutter	Below measurable limit
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)

■ Speakers (SB-PM35)

Type	2 way speaker system
Superwoofer	10 cm cone type
Full range	8 cm cone type
Impedance	
LOW	6 Ω
HIGH	6 Ω
Input power	
LOW	35 W (Music)
HIGH	10 W (Music)
Output sound pressure	86 dB/W (1.0 m)
Cross over frequency	110 Hz
Frequency range	55 Hz–25 kHz (–16 dB) 75 Hz–22 kHz (–10 dB)
Dimensions (W×H×D)	128×240×211 mm
Mass	2.3 kg

■ General

Power supply	
For United Kingdom	AC 230–240 V, 50 Hz
For others	AC 220–240 V, 50/60 Hz
Power consumption	(For United Kingdom) 68 W (For others) 67W
Standby	0.7 W
Dimensions (W×H×D)	180×242×287 mm
Mass	4.8 kg

Notes:

1. Specifications are subject to change without notice.
   Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

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Osaka 542-8588, Japan

En

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